saac Asimov MADE, NOT FOUND

## Fantasy & Science Fiction DECEMBER

THE MAN WHO PAINTED THE DRAGON GRIAULE by Lucius Shepard

Rudy Rucker Charles Platt Richard Mueller

SWA 34 12180782 10/18/84
SWART CHRISTOPHER J
SWART CHRISTOPHER J
1.18 SUNNY MEADE LN'APT 4
MADISON WI 53713-2073
MADISON WI 53713 12 FA
CHRIS SWART
1.334 VILAS AVE
MADISON
MADISON

0 716585

# DAVID R. PALMER CONTROL OF THE PARTY OF THE

OF THE BEST OF HEINLEIN,
THIS IS PROBABLY THE BEST FIRST
NOVEL I HAVE EVER SEEN...

"YOU, LUCKY READER, are about to meet one of the most engaging characters in science fiction history—and the best new writer since John Varley—and if you fall hopelessly, shamelessly, head-over-heels in love, don't say I didn't warn you."—Spider Robinson, author of Mindkiller
\$2.95. ON SALE IN OCTOBER





From cancer cures to germ warfare, from life extension to genocide. nothing any longer seems impossible to the men and women who have learned to control life itself. Aubade for Gamelon, a novel about the birth of the race that will-perhaps-replace our own, is for the New Biology what the works of Arthur C. Clarke. Isaac Asimov, and Robert Heinlein have been for physics and space travel.

#### BAEN BOOKS

December • 55924-9 320 pp. • \$2.95



A novel about the birth of the race that will-perhaps-replace our own.

"One of the best science fiction novels I have read in ten years"

 Dr. Robert Bussard, inventor of the Bussard Interstellar Ramjet and the Riggatron Fusion Reactor

> THE FUTURE IS NOW!

Distributed by Simon & Schuster Mass Merchandise Sales Company 1230 Avenue of the Americas New York, N.Y. 10020

#### A TWENTIETH-CENTURY MAN. FACES THE ARMIES OF CORTEZ—IN

#### THE OTHER TIME

#### MACK REYNOLDS WITH DEAN ING

A step in an old direction—a moment of dizziness—and archeologist Dan Fielding found himself four hundred years in the past. He was still in the Mexican desert... but it was the desert of the 16th century, and Mexico was in the grip of the conquistador Hernando Cortez.

The course of history had to change—

for the land that would one day become the U.S. would be Cortez's next conquest...unless Fielding could erase the Spaniard's bloody footsteps from the New World forever.





#### NOVELETS

SEABORNE 35 Molly Gloss
THE MAN WHO PAINTED THE 134 Lucius Shepard
DRAGON GRIAULE

#### SHORT STORIES

**Rudy Rucker** 8 MONUMENT TO THE THIRD INTERNATIONAL Lawrence Block 59 THE BOY WHO DISAPPEARED CLOUDS 68 Stan Dryer A DAY IN THE LIFE OF A CLASSICS PROFESSOR 85 **Harvey Jacobs** THE MAN WHO CAME CLOSE 106 Anne D. Iordan THE SPACING OF FRED MCNERTH Richard Mueller 109 FINNEGAN'S FAKE

#### ARTICLE

PROFILE OF RUDY RUCKER 18 . Charles Platt

#### DEPARTMENTS

BOOKS 26 Algis Budrys
HARLAN ELLISON'S WATCHING 98 Harlan Ellison
SCIENCE: Made, Not Found 123 Isaac Asimov

INDEX TO VOLUME 67 162

CARTOONS: ALEXIS GILLILAND (84), JOSEPH DAWES (122)

COVER BY JAMES GURNEY FOR "THE MAN WHO PAINTED THE DRAGON GRIAULE"

EDWARD L. FERMAN, Editor & Publisher DALE FARRELL, Circulation Manager ALGIS BUDRYS, Book Review Editor

ISAAC ASIMOV, Science Columnist AUDREY FERMAN, Business Manager ANNE JORDAN, Associate Editor

Assistant Editors: BECKY WILLIAMS, DAVID MICHAEL BUSKUS

The Magazine of Fantasy and Science Fiction (ISSN: 0024-984X), Volume 67, No. 6, Whole No. 403, Dec. 1984. Published monthly by Mercury Press, Inc. at \$1.75 per copy. Annual subscription \$17.50; \$19.50 outside of the U.S. (Canadian subscribers: please remit in U.S. dollars or add 20%.) Postmaster: send form 3579 to Fantasy and Science Fiction, Box 56, Cornwall, Conn. 06753. Publication office, Box 56, Cornwall, Conn. 06753. Peoton class postage paid at Cornwall, Conn. 06753 and at additional mailing offices. Printed in U.S.A. Copyright © 1984 by Mercury Press, Inc. All rights, including translations into other languages, reserved. Submissions must be accompanied by stamped, self-addressed envelope. The publisher assumes no responsibility for return of unsolicited manuscripts.

### Sharon Green introduces a memorable new super-heroine

Diana Santee woke to find herself stranded on a starcraft bound for nowhere. Then, beyond all known space, she was saved by an undiscovered star federation...that needed her for a desperate mission on a medieval world.

But Diana's space-agent training had not prepared her to become the unwanted mind-guest of a terrified virgin princess. Nor for betrayal into the dark clutches of a most primitive slavery.

#### MIND GUEST



The Exclusive Science Fiction and Fantasy Line Selected by DONALD A. WOLLHEIM

Distributed by NEW AMERICAN LIBRARY

SCIENCE FICTION

As Charles Platt points out in the profile that follows, Rudy Rucker's fiction tackles ambitious subjects in a most unsolemn manner; see, for example, the story below. New books by Mr. Rucker include MASTER OF SPACE AND TIME (Bluejay) and THE FOURTH DIMENSION AND HOW TO GET THERE, non fiction from Houghton-Mifflin.

### Monument to the Third International

#### BY RUCKER

draft plucked at Luanne Carrandine's blonde hair. Visions of claws, shadows of deliverance.

"You see?" her salesgirl was saying. "There's a hole in the floor, Mrs. Carrandine. Thank goodness no one fell in!"

A thick mist was drifting up, mist thick and slow as catsup. A tendril snaked up to encircle Luanne's calf. She caught a whiff of the stuff then, and tiny voices seemed to call from every corner. Luanne shook her head and widened her eyes. Come on, she thought to herself, this is Monday morning, Luanne baby, it's get-it-together time. The facts, please.

The facts: There is a big, round-hole in the floor of the dressing room of Luanne and Garvey Carrandine's dress shop. The hole is oozing smoke. *Bummer*. Rain-gray post-holiday Monday, down there in Killeville, Virginia, man,

and the goddamned store is like falling apart. At least I don't have hair on my face.

The mist gave off an electric ozone charge. Breathing it, Luanne felt good, tight, strong, tingly.

"Is that the basement?" her salesgirl inquired.

"There isn't any basement," said Luanne. "None of the plaza stores have basements, baby. There's just a concrete slab, and garbage under that. Who found the hole? Have you called the fire department?"

"I — I found it, but I haven't called. I wasn't sure who — do you think there's been a robbery?"

Luanne stepped back from the hole and looked around. Tops and bottoms, silk and fuzz. "I don't know what the hell anyone could have stolen, Kathy. There's nothing here worth taking — just ask our customers." She

#### Presenting

#### **HARLAN ELLISON**

#### "THE DARK PRINCE OF AMERICAN LETTERS"

The Beast That Shouted Love at the Heart of the World

This newly revised definitive edition includes the Nebula and Hugo\* Award winning short novel, "A Boy and His Dog," and fourteen other brilliant works of imagination. A Bluejay Special Edition paperback.



BLUEJAY BOOKS is proud to present these other Harlan Ellison Special Edition paperbacks:

DEATHBIRD STORIES \$6.95 ELLISON WONDERLAND \$6.95

Coming in December:
APPROACHING OBLIVION
\$7.95

\$6.95 Cover Illustration: Barclay Shaw Pete Hamill

\*as a film, Hugo for Best Dramatic Presentation

#### AND AT LAST IN PAPERBACK

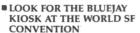
The Engines of the Night by Barry N. Malzberg

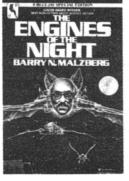
WINNER OF THE LOCUS AWARD, HUGO NOMINEE BEST NON-FICTION ABOUT SCIENCE FICTION

\$6.95 Cover Illus

Cover Illustration: Wayne Barlowe









Bluejay Books Inc.
James Frenkel, Publisher
130 West 42nd Street, Suite 514
New York, New York 10036
Distributed by St. Martin's Press

was sick of running the clothes store, sick of making her money a dollar at a time. The mist had her feeling reckless. "Maybe it's a sinkhole like in Florida. Maybe the whole damned store will fall in, and Garvey and I can collect insurance. I hope so, Kathy, I really do."

Luanne emphasized her point by jumping up and down. She was a small blonde with bold eyes and a pert mouth. Bold and round, pert and lipsticked. She was early thirties going on Sweet Sixteen.

Kathy watched her boss jump up and down. The jumps were surprisingly high. "What shall I do, Mrs. Carrandine?"

"Go on home, honey. I'll get Garvey and the cops and the insurance men over here. We'll stay closed for two days and then have a Fire Sale. A Sinkhole Special." She smiled, stopped jumping, and made her way to the phone. "Just run along, Kathy. We'll pay you for today, and tomorrow you can come in and help me mark down some of the tags." Kathy left.

The phone was behind the counter, over on one side with the storeroom and the dressing room. There was mist, and Luanne felt funny again as she started dialing.

"What's up?" asked Garvey's voice. He dealt with their wholesalers from an office downtown.

"Honey, there's a big hole in the dressing room floor. It's like a manhole."

"Uh, how deep is it?" Garvey was not an excitable man.

"I don't know. But ... I'm starting to see things. Hurry."

When Garvey reached the store, he found Luanne at her desk, drawing pictures with her youngest daughter's colored pencils. The whole floor was covered with mist, a slow gray carpet of magic gas. Some of the stuff drifted up to meet Garvey's nose. He inhaled and saw the shop fill with lazy blobs of color. It felt like skin diving midst tropical fish.

"God loves me, Garvey, He's sent me a vision. Just look at *that* one the teal scroll with red stars printed on it? Can you see that as a blouse?"

"Uh...." Garvey could see it, sort of.

"Yes, Garvey, we can do it! We'll collect insurance and sell the store and start making our own line of clothes. *Luanne's Luxuries*, can you dig it?" She breathed deeply and looked around, eyes ablaze. "All these new images, it's just fantastic!"

Garvey was a tall, slim man with a perpetually unfocused air. He regarded his wife for a moment, then went to look at the hole in the dressing room floor. The way the mist was pouring out, it was hard to see in. He wondered if the smoke might be dangerous to breathe, then decided not. He felt wonderful.

"Is there a flashlight, Luanne?"

"By the fuse box, Gar."

He got the light and shone it at

the hole. He could make out the sides

— the hole was a slanting shaft some
three feet across — but the bottom
was all fogged up. He went out to the
front counter and found a short length
of leftover Christmas ribbon.

Luanne was too busy with her new fashion drawings to look up.

"I'm going to lower this down into the hole," announced Garvey as he tied the ribbon's end around the flashlight. His skin was tingling, and colors were everywhere. He kept thinking he heard voices. "Luanne? Do you feel as weird as I do?"

She laughed softly and filled in some green cross-hatching. "It's the mist, man, it's giving me teachings. We've got the burning bush right here with us."

For the first time, Garvey noticed that rain was coming through the dressing room ceiling. There was a big hole in the ceiling right over the hole in the floor.

"Hey Luanne, I think it's a meteorite!"

"Straight from heaven, baby. Luanne's Leisure Luxuries!"

Garvey crouched down by the hole and lowered away. The light swung this way and that, a pale blob in the mist. Three feet, six — he was out of ribbon and the bottom was still out of reach. He took a deep breath and reached way down in the hole, hoping to find out how deep it was.

Just then a bit of the floor's concrete crumbled. Garvey fell headfirst

into the fog-shrouded hole.

Time passed. Slowly the mist dissipated. At some point Luanne's visionary state wore off. She looked down at the drawings she'd been working on and wondered what they meant. It was as if she had been drugged for the past hour or so, drugged full and happy. Some of her drawings were of clothes, but others were of buildings. One of the buildings was particularly striking: a vast conical lattice surrounded by two twining spirals of metal. Mounted inside it were four huge glass structures: a cube, a pyramid, a cylinder, and a half-sphere.

But where was Garvey? Hadn't he been here a little while ago?

Luanne hurried through her silent store. There was the hole, and there, three feet down, were the soles of poor Garvey's shoes! He was stuck in there upside down! The mist had poisoned him — he'd passed out and fallen in!

Luanne seized Garvey's feet and pulled. Normally she couldn't have budged him, but something filled her with superstrength. Garvey bumped up out of the hole like a lumpy carrot. Luanne laid him out on his back and began blowing kisses into his slack mouth. He breathed back, twitched, opened his eyes.

"Garvey? Are you all right?"

"Da," said Garvey, his voice strangely gruff. "Pamiatnik III Internatsionala prokety Vladimir Tatlin." His eyes

closed and he went slack again.

Luanne picked him up bodily and carried him away from the awful hole. With fumbling fingers she dialed the rescue squad.

Garvey woke to the sound of his wife's voice. They were each in a single bed — hospital beds. She was sitting up and talking on the phone.

"... responsibility. The insurance won't pay, and we've got to sue someone. Isn't there a World Court? The comet smashed into our store, man. We're in a decontamination room, and they want to bulldoze our store under. What the hell is a lawyer for, Sidney? Stay on it, and call back. Good-bye."

"Uh, Luanne...."

"Garvey! Baby! These idiots think we glow in the dark, man, we're supposed to stay locked up for ten days! The store's screwed and nobody wants to take the blame. I say it's our government's fault — I mean, they're the ones who egg the Russians on."

"The Russians?"

"Those stupid Commies," Luanne fumed. "It was some kind of space probe they sent up to intercept that new comet they discovered. Lenin's Comet? These goddamned spastic Reds wanted to plant a time capsule of propaganda on the comet and bring part of it back."

"Part of Lenin's Comet?"

"That's what crashed into our store. The probe smashed the comet all to bits. Our store got hit by about six tons of frozen comet. The stuff boiled off into gas, and that's what flipped us out, Garvey, that's where the visions came from."

For someone in a hospital bed, Luanne looked surprisingly well. Her cheeks were flushed with excitement, and her round eyes were bright with plans.

"They want us on the *Today* show, Gar, but the doctors won't let us out. There's got to be big money in this somewhere. It's just too bizarre. Drugged-out on space gas!"

"Was I in the hole very long?"

"I was sort of wasted, baby, so I'm not too sure. Half an hour? What was it like?"

"I...."

Garvey was interrupted by a voice from the TV screen. It was a fat doctor, talking to them on closed circuit. "Hello, Mr. Carrandine, I'm glad to see you've snapped out of it."

"Let us out!" shouted Luanne. "What about our children?"

"Your children will be taken care of by a policewoman, Mrs. Carrandine. Surely you must understand that your quarantine will last until we have finished our batteries of tests. The material you and your husband inhaled is unlike any other substance known to science. My colleagues tell me that it must come from a different galaxy, where the weak force is—"

"CRAP!" Luanne threw her sheet over the TV screen and camera. "Come on Garvey, help me figure out how we can get out of here and cash in on this!"

"Did you hear that? They'll put a policewoman in our house? Jesus. How long have we been here?"

"It's just noon. The kids are still in school. Do you feel all right now, baby?"

Garvey got out of his bed and stretched. He felt good, very good indeed. It would be nice to get some lunch. A fast-food triple-burger and a milkshake, for instance.

The air in front of his chest grew thick. There was a pale flickering, a slight buzz, and — *PLOP*, a burger 'n shake dropped out of the air to splatter on the hospital room floor!

"Oh my God!" Luanne had been watching closely. "Can you do that again, Gar?"

This time he stood next to the dresser. Make it *two* shakes and burgers. Nothing to it. Buzz, flicker, click — there they were.

"Jesus, Garvey. How come I can't do that?"

"I got more of the gas than you did." Garvey ate as he talked. "I always knew something like this would happen to me, Luanne. I'm Superman! I can do anything I like. And the IRS can go straight to hell!"

"Don't, Garvey! You've got to be careful what you wish! Don't wear it out on garbage!"

There was a fumbling outside, and the inner door of their room's air lock swung open. It was a man in a baggy white decontamination suit. His face was obscured by bulky air filters.

"Yrrnd shhhnnddt chuchufff mnnn krrrdnnn!" The bulky figure reached for Garvey's lunch.

"Uh, Luanne, do you think...."

"Yeah, baby. Let's split."

The scene around them flickered like two intercut films and resolved itself into the Carrandine's living room.

"Oh, Garvey! Make a lot of gold, man, I mean like hundreds of pounds! Quick before the pigs get here!"

A small ingot of gold thudded to the floor. Then another and another and another — the rain of metal lasted a full minute. Garvey paused and regarded his riches with a vaguely dissatisfied air.

"That's good for a few million bucks, Luanne. Go hide it, and let me concentrate. I've got to do something much bigger. There's not a whole lot of time left — I can feel my powers wearing off."

Obediently, Luanne got her daughter Betsy's wagon and began lugging ingots into the den. There was a fireplace in there with a trapdoor you could lift up to shove the ashes in. One by one, Luanne stashed the gold bars in the hidden ash barrel.

There were sirens in the distance. Garvey lay on the couch with his eyes closed. As Luanne hurried back and forth with the heavy ingots, she saw girders rising up around their house, steel beams shooting up like fountains. Some vast tower was growing

overhead, some eternal monument to Garvey's power!

Luanne hid the last ingot and went to stand by Garvey's laboring head. "Can you hear me, baby?" A weak nod. "Are you done?" Another nod. "Can I have a chicken sandwich and glass of red wine?"

"No," said Garvey, smiling a little. "You'll have to buy it, Luanne. I've used up all my power."

The room was in shadow, darkened by the immense bulk overhead. Luanne laid her hand on Garvey's cool forehead. "What did you make out there, baby?"

"A tower. I saw it when I was in the hole. I don't know what it means, but I had to make it. It's sort of a giant clock. Let's go outside and see how it turned out."

The structure overhead was inconceivably vast. Standing under it was like standing under the Eiffel Tower. Garvey and Luanne had to walk a good five minutes till they could get a decent view of the thing. People were milling about like excited ants, but for the moment no one stopped the Carrandines. They reached a good vantage point and feasted their eyes.

"I *drew* that," murmured Luanne. Garvey just smiled, happier than he'd ever been.

The tower was a giant cone swept out by two linked spirals. Supported by a great spare lattice of strutwork, the spirals narrowed up to a point hundreds and hundreds of feet overhead. Inside the giant structure were four great glass jewels, four whole buildings suspended one above the other: a cube, a triangular pyramid, a cylinder, and a hemisphere.

"They rotate," said Garvey. "The cube once a year, the pyramid once a month, the cylinder once a week, and the hemisphere once a day. It's never the same. A monument with moving parts."

"Can we go in?"

"Yeah. See that!" Garvey pointed to a great slanting shaft that leaned up along one side of the tower. A shaft twice the height of the Empire State Building. "There're elevators in there. The cube is an exhibition hall, the pyramid is an auditorium, the cylinder is offices, and the hemisphere ... the hemisphere is for us."

"There they are," someone shouted. "There're Carrandine and his wife!
Get them!"

The fat doctor and some other men came rushing up to Garvey and Luanne. "Did you build this thing?"

"Uh...."

"Sure Garvey built it! You should be down on your knees thanking him, man."

"Do you know what this tower is, Carrandine?"

"I — I got the idea for it when I was stuck in that hole."

"No wonder. We found the Russian time capsule down in the bottom. A Communist artist named Vladimir

Tatlin dreamed up the design for this tower in 1919. Monument to the Third International. Fortunately the Soviets never had the funds to construct it. But now you...."

"Talk about uptight!" interrupted Luanne. "What's 'the Third International' supposed to be?" No one seemed to know. And once Garvey had promised to pay for the monument's upkeep, no one really cared. The great tower stands in Killeville to this day — go see it next time you're down South!

—FOR HENRY AND DIANA VAUGHAN



#### IMPORTANT NOTICE TO SUBSCRIBERS ON THE MOVE

If you are planning a change of address please notify us as far in advance as possible, and allow six weeks for the change to become effective.

Be sure to give us both your old and new address, including the zip codes. Print clearly and, if possible, attach an old mailing label.

OLD ADDRESS (attach label he Name		7 — — · ا ا
Address		
City		
State (please print)	Zip	
NEW ADDRESS		
Name		<del></del>
Address		<del></del>
City		· .
State	Zip	

SUBSCRIPTION SERVICE, Mercury Press, Inc., PO Box 56, Cornwall, Ct. 06753 Fahrenheit 451 · Ray Bradbury

Arthur C. Clarke RENDEZVOUS WITH RAMA

**DRAGONWORLD** 

BYRON PREISS, MICHAEL REAVES AND JOSEPH ZUCKER

MICHAEL CRICHTON

SHADOWKEEP ALAN DEAN FOSTER

010-10110-1-101

STARMAN JONES ROBERT A. HEINLEIN

## Booted up any good books lately?

#### Introducing Trillium™ interactive software.



Maybe you've wondered what kind of software a giant like
Bradbury or Crichton or
Clarke could dream up.
Maybe you've wondered
what it would be like to be

the hero in one of their mind-boggling adventures.

Or maybe you've just wondered if you'd ever see software that knocks you right out of your seat—and literally lands you in a whole new world.

Well, now you can stop wondering. Because now there's Trillium. An entire line of games produced in collaboration with the greatest science fiction authors of our century. An entire line of the most challenging, most exciting, most rewarding adventures ever created. Adventures that put you right in the center of action—and completely in command.

Only Trillium gives you programs like **Fahrenheit 451**, Ray Bradbury's timeless masterpiece about one man's courage to defy a book-burning, repressive state. Only Trillium combines

a line of classic fiction with state-of-theart interactive features—features like full-color graphics, advanced text parsers, and the intense, realistic game play of multiple-disk programs. And only Trillium gives you these benefits in every single game.

Trillium. We give you more than great software. We give you great books to boot.



#### **TRILLIUM**

In the last decade's deluge of published material about SF, the work of Charles Platt stands out. His series of interviews with men and women who write science fiction (collected in DREAM MAKERS, Berkley) are by far the most revealing and entertaining the field has to offer. Here, he visits Rudy Rucker

#### Profile of Rudy Rucker

#### BY CHARLES PLATT

udy Rucker, mathematician and science fiction writer, is trying to explain to me his conception of the universe and our place in it, using terms that a layman can understand.

We're sitting in his office, a disused upstairs room that he rents in a semiderelict wooden building in Lynchburg, Virginia. An old gray steel desk stands in the center of bare floorboards. A human skull decorates the mantelpiece above a boarded-up fireplace. There are pale rectangles on the walls where pictures used to hang. The remaining furnishings consist of a ragged armchair, a couch upholstered in peeling white vinyl, piles of reference books, and an Escher print.

Outside, crickets chirp amid a tangled mass of kudzu that has totally engulfed the yard and is working its way across the roof. A freight train clatters by.

Rucker, a genial man with dreamy eves behind severe rectangular glasses, leans back and rests his bare feet on the desk. His explanation involves infinite-dimensional space, a tough concept to get across to nonscientists. "Life is so full of pain, and suffering, and hatred, and unhappiness," he begins. He pauses. "At least, my life is. But I find it makes me happy to remember that the universe is a single, organic whole. If you go to infinite-dimensional space, Hilbert space, which I deal with in my novel The Sex Sphere, you can fit it all together. My concept of the universe is that it's a single pattern in an infinitedimensional space, and when I'm able to remember this - which is not often enough — I feel very happy and relaxed, because in that sense I'm not cut off in an isolated bag with my own personal problems. I sort of flow

out of myself and merge into the reality around me." He grins and gestures toward the windows, the kudzu, Lynchburg, beyond.

I ask if he's ever thought of starting a religion. This town is, after all, the home of Jerry Falwell's Moral Majority. Rucker's office is, after all, on Church Street.

"I've thought of it. In my latest book there's this character Alvin Bitter, who was also in *The Sex Sphere*. And he has started a religion, called the Church of Scientific Mysticism. It's based in Princeton, and the two saints are Albert Einstein and Kurt Gödel. I gave some talks on this; I enjoy talking about it. It always makes me feel happy."

Rucker's several nonfiction books have ambitiously attempted to explain some of the intricacies of space and time, and infinity — itself a slightly mystical, or at least metaphysical, concept. His fiction has tackled similar big topics, less solemnly; White Light, his first published novel, described an afterlife in which infinity was explored like the surface of a science fictional planet.

I ask if there is any kind of afterlife, or higher plane of human consciousness, that he takes seriously.

"I don't think the individual conpsciousness survives death. But this is something we don't have to be so upset about. Instead of going to infinite dimensions, if we just go to a four-dimensional viewpoint, a spacetime viewpoint, the world would be a sort of tangle of atoms, leaving threads, world lines, in a vast tapestry. Surely the fact that the pattern that you call 'you' only has a certain size in the tapestry ought to be something you can come to terms with?

"The idea of artistic immortality is important to me. I like to think that years from now, somebody who perhaps resembles me physically or has some of the same interests can read my books and briefly experience the same thoughts. In a sense, that doesn't do me any good; it depends what you call your 'self.' If you choose to identify yourself with the universe, then you're automatically immortal."

I comment that a lot of his work seems to link the largest possible cosmic view with the trivia and tribulations of everyday life.

"I've always wanted to bring it all together. It surprises me that more people don't do it, in fiction or in life. In the sixties, we were all getting stoned and talking about God, and I thought, well, everybody will just keep doing this and we'll all learn a whole lot about science and it will be real interesting. But then, to me, what I'm doing always seems so reasonable, I'm just surprised that there aren't more people doing it.

"A lot of mathematicians have extremely limited personalities. They get into mathematics because they can't speak English, you know? In that movie *War Games*, I loved the

computer nerd with the dark hair. It really reminded me of graduate school.

"I finally developed a disgust for pure mathematics, to some extent, because in so many of the papers that people write, there's just no way to bring it back and tie it to anything. A really great scientist like Einstein, or Gödel, or Georg Cantor, or Niels Bohr always takes a kind of double-pronged approach: pushing the formalism, the science, as far as they can, but then always trying to bring it back to real life. I think that's what really good science is all about."

On a less ambitious level, this is the approach that Rucker takes in his own fiction, which often portrays thoroughly real, everyday people grappling with some farfetched phenomenon of time travel, negative gravity, or inertialess matter, with comic results.

His characters are usually misfits, out of sync with their surroundings to the extent that they seem totally alienated.

"Well, I've always felt alienated myself, all my life. My parents lived in the country, and there were no other children around, so for most of my childhood, I would just go walking around in the fields with my dog, thinking my own thoughts. My family — sometimes I had the feeling they thought I was strange. I don't know.

"When I went to school, in the fourth grade, I don't know what I was doing wrong, but they all picked on me, beat me up a lot. That's why I hate straights so much — still, to this day — because I was picked on by jocks, straight people.

"Then when I was in the eighth grade, I spent a year in Germany. That was very alienating, too, because I didn't speak German. But I got to like it, and then I came back to America, and they beat me up some more. All through high school for some reason." He frowns as if it still seems puzzling and inexplicable. "Maybe I was younger than the people in my class, sort of a wimp? Still, college was nice, because I went to Swarthmore, and it was all smart kids, and everybody there was a wimp, so, I was able to appear fairly hip.

"Another thing contributing to alienation was the whole sixties thing where, over and over, you had old people getting up and saying that all of our beliefs were stupid, and that we were drug addicts, and should be in jail, and — you know, that gets to you.

"I wish I felt less alienated, really. I mean, I live out here in the middle of nowhere; I've always lived in the middle of nowhere. Sometimes I wonder what it would be like to be in a city where there are people actively interested in, oh, philosophical issues and things like that." He pauses, as if trying to imagine it.

I don't know Rucker well, but my superficial impression is that he stayed true to some of the rhetoric and styles of the sixties, long after everyone else had gone into regular employment, sold out, overdosed, or settled in surburbia. Rucker himself is thirty-seven and married with three children, but still seems a (shorthaired) hippie in his simple love for loud music, loud parties, and the occasional illegal drug. And he still seems to enjoy the radical, adversary spirit of the sixties.

"One way my novels all resemble each other is that there are hard-line terrorist-anarchists in there, and a lot of sex that's going to outrage people. I do it more or less deliberately to freak people out as much as possible — and then when it's published I expect everybody to love me for it anyway.

"But they don't. So, because they're mean to me, in the next book, I pick on them even more.

"Same thing in my social life, I mean, I'm surprised I still have any friends. Particularly if I'm partying hard, on the weekend, I'll do some extremely obnoxious things, just to really bug people. Foul language, or tell people the thing that makes them the most nervous, you know? They might be nervous about the police, or about homosexuality, so I'll pretend I'm a narcotics agent, or pretend I'm a homosexual, anything that'll make them as uptight as possible. I don't know why I do it, really. Well, in a sense, all literature is protest literature." He pauses. "I heard John Updike say that once; I thought it sounded nice."

Of course, living in Lynchburg adds to the angst. He moved here, originally, only because he was offered a teaching job at a local college.

"But I lost that, as I had also lost my previous academic job in upstate New York, and that built up a lot of resentment in me, because each time it was a situation where I would have stayed if they had let me. All my colleagues were shocked and outraged, because here I was publishing more than anybody else at the college, but the administrators just said, 'We can tell what you're really like, and we don't want you here.'

"In teaching, there are three things you have to do. First of all, you're supposed to publish, but a lot of people never do that. Also, you're supposed to be good at teaching — O.K., well, a lot of people can't do that too well, either. But maybe the most important thing is what they call 'collegiality.' Being willing to sit around the coffee lounge and, you know, talk to people about, oh, getting their cars repaired, or grading term papers — I really hated all that.

"So now I've been without a job for two years. It's nice, but it's hard to keep coming up with new ideas. In a sense I could write a science fiction book every year, probably. I may indeed end up doing that. But at some point also there's a feeling that you're beginning to repeat yourself. If you

look at anybody who writes twenty science fiction books, a lot of them are very similar."

I ask how he entered the field. He had already published his first non-fiction book, on the fourth dimension. Why did he try writing science fiction?

"I think it was in '74, the day after seeing the Rolling Stones play in Buffalo. I was just so excited. I started a book, which later became Spacetime Donuts. For some reason I wanted it to be an attack on the idea of public safety. I wrote a whole first chapter about that, which I never actually used. I wanted it to be viewed as the first definitive hippie novel, or something like that. I was really out of it. I'd never heard of the 'new wave' in science fiction, so I was telling people, 'This is going to be a new-wave science fiction book.' And they said, 'Well, Rudy, that ended like three years ago.'

"I enjoyed underground comix a lot, and I had this idea that all the people who liked underground comix would read my science fiction. Anyway, I sold it to *Unearth* magazine, and they serialized two parts of it, and I got a hundred dollars, or maybe it was a hundred and twenty, and then they went out of business, and well, that was it. So I was thinking ... should I pursue this?

"That was when I had to leave my teaching job in upstate New York and got a grant to go to Germany. This is the one thing that mathematics finally did for me. I'd written a paper called 'The One-Many Problem in the Foundations of Set Theory,' and, on the strength of that, I was able to get a grant. I was supposed to do research on different orders of infinity, particularly on Cantor's continuum problem. That was Mid-Life Crisis, Stage One. I was twenty-six, it seemed I had no future in mathematics, I realized I wasn't going to solve this problem, because, well, it's a one-hundred-year-old problem, and it's very hard." He laughs.

"So I thought, 'Here I am in this office, and they don't really care what I do.' So I decided to write White Light."

Rucker sold that novel to Ace Books, who packaged it as a "voices from the afterlife" cultist tract, which may have discouraged some of its potential readers. Ace then published Spacetime Donuts, and thus far has published all of Rucker's work, including his excellent short-story collection, The 57th Franz Kafka.

Many of these stories feature eccentric, low-budget scientists fiddling around in suburban basements, reminiscent of the stories H. G. Wells once wrote about penniless inventors stumbling on antigravity or immortality drugs. I ask if Wells was an influence.

"I read *The Seven Novels of H. G.* Wells when I was in high school. And I still go back and read him; in fact,

he had some very interesting stories about the fourth dimension, also. But I was more influenced by Heinlein's early work, which is fast-paced and has a very realistic feeling. I like that quality of it.

"Another early influence, which helped me start writing, was *Bug Jack Barron* by Norman Spinrad. Here was a book with cursing and drugs and sex, and I thought — well, those are things *I'd* like to write about, too. It showed me that the market had opened up to the point where that was admissible.

"These days, I don't read science fiction very much. Either it doesn't have enough science, or it's too plastic, or the characters are totally predictable. When you read someone like Asimov, the characters are just interchangeable. They always agree with each other, they say, 'Would you tell me more, Doctor.' Well, when I'm trying to explain something to one of my friends, that's not what they say. They say, 'Fuck that, let's go get some beer, I don't want to hear that right now.' Characters in books should act in this same kind of stubborn, unexpected way; I think it's much more interesting for the reader."

I ask who his literary influences are outside of the science fiction field.

"William Burroughs, I really loved. I've studied and studied his books. And Jack Kerouac. My science fiction isn't very much like Jack Kerouac,

but this summer I was trying to do a book like him. It's the story of my own life. I even went to the trouble of slavishly imitating the way Kerouac had done it. I got this giant roll of paper from a photocopying machine, so I could feed that into the typewriter and just write and write and write. The page is like a four-to-the-bar beat, or something. This was more open to improvisation. But I don't think I'm ever going to sell it."

I ask if it's been harder to sell his novels, and build an audience, than he expected.

"Being a writer takes your whole life. It's much more drawn-out and grueling than I had ever imagined. I think my work is getting out there to the right people; and the only problem is, there don't seem to be one hundred thousand of them.

"The distribution of science fiction novels is very disappointing, because they're published almost like magazines. They're on the newsstand completely randomly, for about two months, and then they're gone, you know? People often say, "Where can I find your books?" — and, well, I have no idea.

"I guess what I'd really like is to have some of my novels in hardback so they'd be in libraries, and people could find them. Or I'd like to be able to do what Kurt Vonnegut did. In a way, he's still writing science ficiton, but he gets front-page reviews in the New York Times, and he's making lots of money. And his science fiction

was very, very good. *The Sirens of Titan* was one of my all-time favorite science fiction novels."

I ask what Rucker's next project will be.

"I think I'm going to do a book on language and information theory. I'm going to call it *New Info*. That sounds pretty catchy. Either that or something somber like, *The Language Game: Logic and Rhetoric*. Which do you think would be better? And then I'll do another novel.

"As long as you're working on a book, you have a reason to live. I can see why Heinlein still writes a book every two years. I mean, what else are you going to do? It's hard for me to think of any way to make money that would be more pleasurable than writing. I have a friend who's a house painter; he was urging me to come up and work with him, but I said, 'I'd rather write a book on rhetoric, my good man.' " He laughs happily.

At this point, we take a lunch break. Rucker drives across town in his 1956 Buick, to a sleazy bar and grill where the teenage waitress chews gum and the house specialty is liver and onions on fried bread for \$2.95. He seems absolutely at home here, drinking beer with truck drivers and auto mechanics — as far from the stereotypical image of a mathematician as it is possible to be. His working life, also, seems somehow out of

character for an unreconstructed, laidback sixties radical. He does a regular nine-to-five stint at his improvised office, five days a week, before going home to his children and his wife, who teaches at a local school.

"It does often bother people that the different parts of my personality seem not to add up," he says. "I've always talked much more radically than anybody else, but when it came down to it, I was the only one who was thoroughly suckered into doing what I was programmed to do: go to college, get married, go to graduate school, have children, get a job. I even go to church a couple times a month. But my wife is definitely a stabilizing influence. Having a family life gives me a base from which to work. In a sense you could say it's really plastic to be divorced and go through all that shit. Apparently, staying married is an act of rebellion."

Footnote: In the months since I taped the interview with Rudy Rucker, bis Kerouac-influenced autobiography has become a science fiction novel about UFOs, titled The Secret of Life. It will be published by Bluejay Books in 1985. A novel be completed prior to this, Master of Space and Time, will also be published by Bluejay, in November of 1984.



Searching for her estranged, superwoman mother across the inhabited galaxy, Aleytys—wearer of the Diadem—finds herself on Ibex: an unmapped world banned to outsiders, save for one encircled city.

To venture beyond that enclave meant certain death, for the alien tribes were united in their lust to slay all other-worlders. All the Snares of Ibex awaited Aleytys beyond the wall, but dare she must if her future was to have any meaning. For on this planet, she knew, her ancestral quest must end.

\$2.95

## SNARES OF IBEX By JO CLAYTON

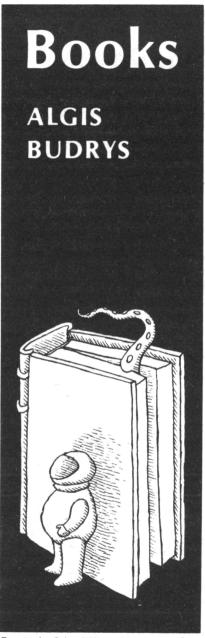
Other titles in the Diadem series are available:

LAMARCHOS
DIADEM FROM THE STARS
STAR HUNTERS
GHOSTHUNT

The Exclusive Science Fiction and Fantasy Line Selected by DONALD A. WOLLHEIM

Distributed by NEW AMERICAN LIBRARY

SCIENCE FICTION



Drawing by Gahan Wilson

Job: A Comedy of Justice, Robert A. Heinlein. Del Rey, \$16.95

*Heechee Rendezvous*, Frederik Pohl. Del Rey, \$14.95

Demon, John Varley. Berkley, \$6.95

God figures prominently in all of this month's books ... not always the same God, but always the central deity of His or Its or Her tale's universe. Gods have a lot of stage presence. On the whole, their very proximity weakens the knees of those playing opposite them ... sometimes, even the knees of Their authors.

There are some things it's very difficult to write about, and perhaps they're all the same thing — the universe in which cause and effect occur at whim if at all. I'm pretty sure this is because the very reason we have fiction is the human faith that every effect must have a cause, and viceversa, had we but eyes to see it.

Life is too bewildering to endorse wholeheartedly. If someone offered it to us from a bookrack, I suspect it would sell only to what the trade calls "a select audience." The authors we revere most, and most lucratively, are those in whose tales there is no ultimate doubt who is doing what to whom, where, when, and why. In that sense, Agatha Christie, Ian Fleming, Irving Wallace and Edgar Rice Burroughs are far more popular creators than Jehovah, who has been known to declare (in an admittedly apocryphal attribution): "No, no reason for

it, Job; it's merely an aspect of My policy."

Perhaps because we are approaching another chance for popular wavefronts having to do with millennial dates on the Christian calendar, or perhaps because of recent exciting trends in physical supposition — i.e., if you can find a physicist who's at all sure of what the Universe is and what stage it's at, you've found an unfashionable physicist — the God of Wrath is returning to SF after a nearly total absence of some decades.\*

By precedent based on the U.S. popular cultural consensus 1930-1980 (which period includes the invention, promulgation and decline of "Modern" Science Fiction), it would have seemed highly unlikely God might be the Jehovah of those to whom the King James Bible is the literal Word. During that half-century, we were very much taken with the idea that we would all soon believe that religious belief was an entirely subjective matter. You could believe or not believe, and what you believed in might and perhaps ideally should be different from what your neighbor believed; and nobody pushed. In Wilmar Shiras' "In Hiding" series, for instance, the adult role-model was a philosophical adherant of Saint Thomas Aquinas, but delicately did not recommend Thomism to his young charges flat outright. Nor was Roman Catholicism ever even mentioned.\*

Similarly, Hugos have been won by James Blish's A Case of Conscience, a post-Modernist novel from the mid-Fifties, and by Walter M. Miller, Jr.'s A Canticle for Leibowitz, both from a period in which "religious SF" was enjoying a vogue.

The nature of this "religious" content is tellingly delineated by the fact that in each of these famous works the attraction is a religio-philosophical system some of the characters believe in, but which the reader is encouraged to evaluate for success as a pragmatic lifestyle in a special dramatic situation, rather than to adopt as a lifelong faith. Even Anthony Boucher, staunch R.C., in a famous shorter work called "The Quest for St. Aquin," achieved his storytelling effect by going precisely this route; by telling a story not about the stuff that lies at the heart of religion, but about religiosity.

The tone of these stories was a casually affectionate or sociological — that is, essentially "tolerant" — intellectual one, created without literal expression of the author's private

"The series ran in Astounding Science Fiction during the 1940s and became the novel Children of The Atom from Gnome Press, 1953. It could hardly have more solid "Modern" Science Fiction credentials, perhaps in particular because ASF's editor, John W. Campbell, Jr., was an avowed atheist with indurate Calvinist roots and Gnome Press's proprietor was Jewish.

<sup>\*</sup>See Lester del Rey's "For I am a Jealous People." Star Short Novels, 1954, for a revealingly contrary example.

emotion. The mark of Post-Modernism is a supervising engineer's manner of studied detachment applied to what had been social situations too hot for Campbell to handle. Irrelevant to us here today is the fact that Blish was in the process of covertly, stubbornly, giving up his Futurian agnosticism. We are talking about what this work was sold as, and bought as, when it was first marketed in the middle of the period when "tolerance" was the first word we were all taught in grade-school civics classes from coast to coast even if it twisted our guts.

Post-Modernism was a brief phenomenon in the history of SF, cut off by the unexpected emergence of the even more intellectually crypto-passionate New Wave in the early 1960s. Attempting to put religion in a test-tube may be Post-Modernism's only other major hallmark, beside the more famous success of such "comic inferno" politico-philosophical works as *The Space Merchants* and its scores of imitations. But it may be that what was the less prolific mode is having the more enduring evolutional descendants.

Robert A. Heinlein was, of course, the archetypical "Modern" Science Fiction writer, and his passage beyond those horizons, with *Stranger in A Strange Land* in the 1960s, has popularly made him not a mutineer but a daring navigator. *Stranger*, as it hap-

pens, is about Messianism, but it is still a book whose intellectual basis is no later than Post-Modern, perhaps only because its first half was written during Campbell's ascendancy (and perhaps shelved at that point because of him?). At any rate, one is clearly not intended to go out and worship Stranger's particular Messiah. But Stranger, with its evangelical overtones, proved to tap into a great if then unclear predisposition on college campuses and in other reservoirs of gathering emotion. I think this form of success may have sent Heinlein to look at his calendar, viz.:

Another landmark intellectual conception of "Modern" Science Fiction was (and is) Heinlein's famous Future History, which is like no other in that insofar as it deals with our times, it seems to be coming true. Created in the 1930s, seemingly just for the purpose of providing an armature on which to hang future fictions, it has an excellent predictive track record across as much of the future as we have since lived in.

This used to be an inexplicable marvel to me. How does a young man, granted he's very smart, standing rooted in the 1920s and early '30s, predict that by 1984 we will be living through The Crazy Years? It is no longer as inexplicable, though it is still marvelous. The Future History appears to be a transliteration of past history as it coalesced around The Reformation and then barreled on up

into our times at dizzying evolutionary speed, spiralling as it came. But for Heinlein to have grasped the expanding cyclical patterns in human mass behavior, and to have had the detached ability to translate those patterns into points on a chart of contemporary idiom, is an awe-inspiring intellectual achievement.\*

By 1967, however, when Putnam brought out The Past Through Tomorrow. a collection of Heinlein stories billed as his (assertedly complete) Future History series, certain parts of the History had disappeared. Damon Knight's introduction speaks of "some modifications" from the original layout. The accompanying History chart still lists Evangelist Nehemiah Scudder, and speaks of a "rise of religious fanaticism" around the turn of the year 2000, but the story called "The Stone Pillow" on the original charts has vanished, one assumes not only never to be written but hopefully never to be remembered.

I do wonder what Reverend Jerry Falwell might have made of it if Heinlein had written the story everyone expected it to be, just as I wondered in 1967 what Heinlein might have thought as he realized he might live long enough to see Scudder in action.

Well, now it is but sixteen years

before the Millennium, and Heinlein has written Job: A Comedy of Justice as distinguished from a tragedy of errors ... ie, of deviations from rational cause and appropriate effect. Ergo, rational cause and appropriate effect are, seen in the proper perspective, hilarious.

And the new book really is pretty funny, if you remember that Heinlein's total picture of humor, and of several other things, is founded on bases that exist best in the milieu of a Kansas City men's luncheon club circa 1925.

Which is also to say that he is entitled to enormous sapience and strength of character, both of which are qualities he indeed almost unfalteringly commands in the manner of one born to the tradition. He does falter, now and then, as evidenced within most of the work done since the middle of Stranger. When he does, it's a faltering I understand best when I put it in terms of Jack Woodford, a now usually forgotten sex-novelist of Heinlein's formative years, whose writings and whose text on writing Heinlein still enthusiastically endorses. Woodford, vis-a-vis probable parental reaction in K.C. at the time, was the Cheech and Chong of his day. If you're gonna declare title in your own cojones to the Old Man, do a job thorough enough to make him proud. And then make it an ineradicable part of your psychic substrate, to validate the depth and forthoughtfulness

Books 29

<sup>\*</sup>To do it, he had to give up everything be might wish for, in favor of what must come believe it or not. Could you do that? I couldn't

of your strength.

Friday, his most recent previous novel, you were told elsewhere was Heinlein coming back to his accustomed skill. Here, you were told he was coming back toward it. With Job, he is much nearer that target. Job's a pretty consistent book, and in addition there's the famous ability to keep you turning the pages. Whether that's the target Heinlein was aiming for is another matter.

It's an awkward book. Now, if what happened to Job of the Bible is in some gargantuan sense risible - a view Wiley Coyote might grudgingly endorse — then what happens to Alexander Hergensheimer, puritanical bigot but otherwise a nice-enough guy, ought to feel awkward to him. One moment he's successfully negotiating a Polynesian fire-walking pit, and the next he has begun a series of plunges through alternate realities (and moral milieux) that would leave anyone not knowing whether to laugh or to cry. Toward the end, when he - along with the rest of one reality's deserving members - is taken up bodily into Heaven (by a Kansas tornado), things get awkward indeed. It turns out that although he is an indubitable Christian saint, able to perform miracles, he much prefers a lively, rationally directed Hell to the sterile, rigidly patterned literal City of God. Heaven, depicted from carefully researched descriptions, is not only as welcoming as a hammock carved of marble but also staffs its bureaucracy with smugly patronizing angels who run a dormitory-cafeteria social system.

I am morally certain this is not the book Heinlein thinks it is. Alexander Hergensheimer, for example, speaks exactly in the voice of all Heinlein heroes, who have always been competent persons almost entirely on top of the situation. Even when the hero of Beyond This Horizon was actually sprawling on his can in a figure-dance, or when Manuel Garcia O'Kelly was making only one crucial perceptual error in The Moon is a Harsh Mistress. the lapses of these viewpoint characters have been rather loveable. Hergensheimer, however, is a new sort of role. He almost never causes anything to happen. Things — capricious things that never rattle before they strike keep happening to him. The essence of his story is that he alone among all the forefront characters is not the Person Who Knows How. And that doesn't quite fit; as depicted here in his own first-person voice, Hergensheimer is not buffoon enough for us to giggle at, and yet is demonstrably not the hero whose accourrements he keeps donning. I think Heinlein may believe this tale is full of bellylaughs; it ain't. It's full of fits and starts, like life.

The voice of Hergensheimer is assuredly the voice in which we all speak of sagas, so another view of this aspect of *Job* might be that we are seeing it honestly from the inside. But if so, I think Heinlein has miscal-

culated how this will sit with the reader. Somehow, it's not possible to believe that God (or Whoever actually runs the Universe) would play dice with a Heinlein protagonist.

All over this book are the signatures of great care taken and considerable enjoyment derived. But something, somewhere, has gone slightly wrong. Considerable enjoyment is not quite delivered, although it can be seen shuttling past and very near, as if proceeding in a world only infinitesimally different from this one, and we on the wrong side of the veil.

The Heechee were like God. In Gateway, Frederik Pohl's masterful opening novel in the trilogy, they were exactly that, as many alien races have been in various SF works over the centuries.

I was speaking of Wiley Coyote a while back. Actually, I meant a more obscure cartoon milieu, which came and went from Warner Brothers in the latter 1940s and is never revived in mass media. The problem is that the part of Coyote was played by a plump, prepubescent black African boy, bumptiously out to test his untutored prowess against the dangers and opportunities of the cartoon African jungle. This character is not acceptable today, although I for one would willingly take him for a wellchosen representation of Humanity's present state.

This un-named lad, on getting into mischief with the occasional un-

amused lion, etc., would find himself rescued now and then by the apparent intervention of a bird. This bird - a plumpish, unruffled sort of toucan with a silly walk - was bound on his own errands in a totally self-contained way, but lightning (or the equivalent) would smite the lion. It was never clear why this happened, but the implication emerged that the bird took exception to the lion's behavior per se, as distinguished from an attitude of approval toward the boy. Whenever the boy tried to propitiate the bird, or capture or so much as delay the bird, lightning smote bim.

This is a much more complex milieu than that of Wiley and the Roadrunner. I have never actually heard anyone offer a theological explanation for the appeal of Roadrunner cartoons, whereas everyone who has ever recalled the boy/bird series in my presence has automatically called it the God-bird. People have a considerable psychic understanding in that area, and it ought to be no trouble to prove that many major SF themes that appear to be agnostic or even atheistic are in fact profoundly devotional. And in Gateway, the Heechee were powerfully effective on the reader precisely because they were the God-bird.

(The situation in the Heechee trilogy is that Humankind discovers and clumsily utilizes enigmatic artifacts left behind by a now-vanished star-travelling race we call the Heechee. These include ships and lesser machines. Some humans grow inor-

dinately rich, using these devices; most just prove to have been wasting their time, and quite a few disappear or die. The book — in an outstanding example of justice done repeatedly — won enormous praise and a great variety of awards from many quarters. It is unquestionably the best single piece of work done by Pohl in a long and stunningly effective career.)

In the sequel, Beyond the Blue Event Horizon, the Heechee were (A) dis-vanished and (B) de-moted. They were still around, somewhere, it turned out, and this was a scary notion until, immediately thereafter, it turned out they were hiding from their own God-bird.

At that point, things came back to Earth with a thud. Stories in-which we are promised a confrontation with God have abounded in the literature. And a writer forced to actually deliver such a thing apparently has the choice only of depicting a very thin kind of deity or of saying well, it turns out this wasn't God at all. Much of the time. what we get is a combination of these cop-outs. Mind you, I don't see how you're going to not ultimately cop out an attempt to treat at any great length with the nature of God and God's policies; the most successful recent formats have indeed been japes - which is, of course, only a more subtle cop-out.

At any rate, *Heechee Rendezvous*, the concluding book, is a true chefdoeuvre; a master professional's at-

tempt to tie up all the loose ends into what appears to be an exciting and satisfactory story, and a nearly successful attempt.

Once the little boy has caught the bird, of course, certain effects are forever foreclosed. Having the bird declare that there is another bird will not restore those possibilities. But Pohl shifts gears into writing just plain a very good story of interstellar problem-solving, with the Heechee, and various Terrestrial characters, converging on the menace. The menace is a race which has set cosmological forces running so that this universe will be destroyed and another universe will be created nearer to its heart's desire

In aid of this proposition, Pohl has set out a dazzling array of furniture, which array closely resembles ideas in a fresh new novel. But what they are is items on a list drawn up by going through the previous two books and noting all the characters left unaccounted for, all the mysterious artifacts not yet tagged and blueprinted, and so forth ... furniture, precisely, as if a home were nothing more than what the interior decorator leaves behind.

There are some powerful red herrings, as when Albert Einstein begin to play an increasingly effective and willful role, meanwhile casting interesting lights on the real Einstein's actual religious belief and how it forever conditioned his scientific thinking. There is — in common with the Heinlein and the Varley — a proposition for how life might persist after death. Pohl's method is, furthermore, one that might be on sale at Radio Shack before the end of the next century, if not before the end of this one.

But in the end, Pohl apparently forgets that from the reader's point of view, more is supposed to be going on than simple list-completion. The craftsman forgets that his audience does not know he is simply being craftsmanly, is not satisfied to be shown only a sketch of how he could have done a particular part. And that's what the last chapter suddenly is; a sketch of what might have been done if he hadn't run out of time, or paint, or scaffolding.

In common with the other two books, Varley's *Demon* not only reveals that God is no God and death is not death, not only abounds with loose ends while declaring they have all been tied up, but in fact never solves any of the ethical problems it began by setting up.

I have a pretty theory that Job is actually the third book in a trilogy, with Stranger and with The Number of the Beast. Since Demon is the third book in Varley's series about the living wheel-world of Gaea, following on Titan and Wizard, that's yet another commonality among these books.

Have another, what the Hell: These

three writers are not only outstandingly talented but each is arguably in the very forefront of his own generation, each representing a major evolution in the general style of SF. And each has chosen our present time to arbitrarily (?) set about tackling God in his characteristic way. It is as if, somewhere, John Campbell were still in place at some vasty Desk, handling the same catalytic idea to all his best writers and then sitting back to chuckle happily over the results.

If you liked Titan and Wizard, you'll like Demon. It has everything in it that furnished its predecessors; airwhales, Titanides, angels, buzzbombs, boundless invention of landscapes and characters worthy of pre-War Disney. The man has prodigies of imagination in him, and his recent brush with Hollywood has additionally populated his mind with creatures called arriflexes and bolexes, producers and directors. These are associated in symbiotic activities that, guaranteed, will seem convulsingly comic. Gaea has also now taken on the semblance of Marilyn Monroe, on a scale of size appropriate to the scene in which (we are told, but not quite actually shown) she successfully wrestles King Kong.

(Gaea is the most successful of a brood of vast, highly intelligent organisms existing as satellites of the outer planets. Externally, she looks exactly like a classical wheel-shaped spacestation on a huge scale. In fact, the thing is her body. Inside, she operates a complete ecological system that can process organic and inorganic matter into any form. She is fascinated by Earth and its people, but her actions toward them are at least not benign. As she grows more senile, she becomes capriciously hostile. Varley's stories take place almost exclusively inside her. Able to create embodiments, Gaea also roams around inside herself.)

In that portion of his arena, Varley simply cannot be beaten. Rigorously logical as to its biochemical premises, his story proliferates such marvels. But, once again, what I take to be marketplace pressure to replay the successful signatures causes him to almost methodically make sure we see all the old wonders, even if occasionally it's now necessary to explain they're not what you were told they were, or the plot won't wind down properly.

On one hand, we have the potentially fascinating Hollywood motif as a new thing (although Varley belabors it somewhat). On the other hand, it acts to make clutter while the author

is trying very hard to clean things up. On one hand, we have been told through two books that Gaea is God. and on the other hand as it becomes necessary to kill God, it is (A) made to sound almost hopeless - as it should — but (B) proves ridiculously easy - though Varley throws a lot of smoke to disguise that fact - and then (C) it turns out you can kill God without killing God's body, and so (D) Gaea was not all of God, somebody else is now God, but Gaea wasn't the first God, and so, really, none of these Gods are as fierce, as burdened, as interesting, as we were told they were while we were buying the earlier books.

The fact is that via these (inescapable?) contretemps, every one of these books comes to the same central statement: Its deaths in the end are not real deaths, and its God is not God.

These are in many ways very entertaining books, and will be very profitable books, and are certainly very interesting books. But if we were John Campbell, we might feel we must try again.



Molly Gloss wrote "Joining," (June 1984). Her new story concerns a man named Neye, who is sent to try to unravel the mystery of a woman who may be hiding a rare and wonderful gift.

#### Seaborne BY

MOLLY GLOSS

T here were two people working from a raft near the breakwater, and although Neye thought they could see him standing against the skyline, they made no greeting and certainly no move to come in. It was all low sand hills along that coast, with a tough umber-colored salt grass trying to stitch everything down against the wind, so finally he just sat on the last seaward rise of the dunes, because he was high enough there to see across the roofs of the buildings to the cove. He sat on the grass and waited, watching them.

They took turns. When one's head bobbed up beside the raft, the other would pitch over the side, then the one who had come up would sit on the raft or lie on it until the other diver came up again. They were down four or five minutes at a time. From this distance he could not tell which

of them might be male, which female; their bodies were both brown and narrow and naked above the waist. He could not see a power source, either, but the raft moved gradually south, self-directed, beside the elbow bend of the breakwater.

He waited quite a while. It was hot and there was no shade, and the grass scratched through his sleeves whenever he leaned back on his forearms. The sun fell behind him, and the rounded shadows of the dunes spread out flatter and began to darken the water. When the edge of shade touched the raft, the divers quit. Both of them lay awhile, stretched on their backs on the fiber glass decking, and then they took the little motor skiff that was tied alongside and came in with it, sliding silently past the big two-masted bylander lying at anchor in the deeps of the cove. Gradually, as

Seaborne 35

Neye watched, one began to show the long, thin back muscles of an adolescent boy. And the other became a woman. Her breasts were small and high as a girl's, but her hair, which must once have been black, was grizzled. She wore her hair — both of them did — clipped short in a manner common to offshore farmers, so short it looked like a tight little cap.

When the bottom of the skiff bumped the beach, Neve had already started down toward them. His knees were a little stiffened from the long walk and then the long wait, so he was careful how he set his feet, pushing his boots heel-down through the long straps of grass to the sand. He kept his eyes, though, on the woman. She went over the side and hauled in the boat while the boy was still at the tiller, and then she stood a moment with the sea lapping her ankles, stood flexing her back, with both hands kneading some ache there above the tailbone. She was small, her hands, her shoulders, the narrow bones of her face, small. But there was lean muscle in her arms and in the bare calves that showed below her knee pants.

She steadied the boat a little with both hands while the boy climbed out, and then they dragged the skiff up the sand toward the tide line. Neye was near enough by that time, so he came down and grabbed hold of the gunwale and helped them with it the last little way. The boy shot him a

look, curious at least, or maybe guardedly friendly, but the woman neither looked toward him nor said anything. When they pulled the boat up to the edge of the grass, she reached in for what could have been a sack bunched up below one of the seats. She shook it out and pulled it over her head: a long, loose tunic the color of the sand. Against that paleness her throat and wrists seemed nut-brown. She dragged out a couple of boxes of gear, too, while the boy was pulling on his own shirt, and then she simply walked away, from Neye and from the boy as well, without a word or a look, just grasping the boxes by their handles and starting up the slope toward the buildings.

Neye thought to follow her. But he could feel the boy looking at him straightforward, now that the woman was gone, and so he waited. It seemed to him, among other things, that this would be an easier place to start.

"You walked in?" the boy said.

Neye had left the Osprey in Bedyn. Maybe there would have been room to land it here, maybe not, but most of these offshore farmers affected a sort of contempt of aircraft. When they could not go by boat, they went by foot. And he hadn't wanted to provoke her by setting down in her front yard in a big government flyer.

"Yes," he said. "I walked."

"From Bedyn?"

"Yes." It was supposed to be about nine or ten kilometers. It had seemed

a little more than that to Neye, but fairly easy walking: low rises and a smooth beaten track and — for a while, at least — the shade of the seaward dunes to break the sun.

The boy lifted his head up a little and sideways, as though he had looked away, but in fact he kept his eyes on Neye. He had a wide face, large-pored and reddish brown, like terra-cotta. His hair was reddish, too, or maybe the sun had colored it so. Though he was very young, there were little pleats in the skin beside his eyes. There was nothing about him that was like Cirant, only the boyish thinness, yet looking at him, Neye thought of his own son. And he was aware briefly of his own chronic loneliness.

"She doesn't like itinerants much," the boy said, with that disarming sideways stare. "If you want to spend more than a day or so, you'll do better farther up the coast. Even there you might not find anything steady. We've all had three shitty years in a row."

It would have been easy to play it that way — to pretend to be what he was not. But he doubted it would get him any further than the truth. So he said, "I'm not looking for work. I'm with Registry."

It had been more than five years since anyone from the department had come out here. But somebody had told the boy. Lisel herself, or somebody. Because he looked at Neye straight this time, with a hardened, narrow expression, and then he just

walked off after the woman, going barefoot along the path that was worn down between the cove and the farm buildings.

Neye wasn't much surprised and didn't try to stop him. He went back for his duffel, to the place he'd dropped it on the beach when he had helped them push the skiff up. And then he followed where the two of them had gone.

All the buildings were cheap extruded dobes, so they looked like big stones or terrapins hunched down among the dunes. Through the wall of the largest, he could feel a slight vibration as if it housed a freezer silo. or, more likely, a set of nursery tanks. He stood beside it a moment, delaying, because he wasn't sure which building they'd gone into. The air was cooler now and darkening, and he was alone. Then the woman came from a small dobe at his right, no longer carrying the boxes of gear, her hands pushed in a pouch pocket in the front of her shirt.

He could see that she meant to walk by him without speaking. He did not reach out a hand nor make any motion to stop her, only said, "I'm not looking for work. I'm with the Registry department."

She kept going. There was no surprise in the sidelong look she gave him. "You should have done some checking before you walked all the way out here. Jin is legally psy-blind."

To her retreating back, he said, "I

Seaborne 37

didn't come to talk to Jin."

She didn't stop, didn't turn, but she made a loud nasal sound of amusement. "You still need to do some research. I've never scored higher than eight hundred on any of your many head tests."

He had been standing in one place watching her walk away from him, but she had said enough to set him in motion. He followed her through the brown dusk to the house. "Not everything gets picked up in those neurological tests."

She made only that sound again, that small hard sound like a laugh. When she stooped into her house, the light came up dim yellow. There was one round room with a bite out of it where the bathroom took up space along the outer wall. The room was crowded and cluttered. Neye stood just outside the doorless airportal, waiting, while she went out of sight into the lavatory. And after a while, still waiting, he squatted down in the open doorway.

Probably she showered. Her hair was wet again and combed down smooth against her scalp when she finally came out.

He thought if he had not been there watching from her doorstep, she would have eaten now. But she would not offer him food, and could not prepare and eat it before him. So, stubbornly, she began to pick at the room, making incomplete, indifferent tidying motions among the remains of her breakfast.

There was no point in waiting: "In Bedyn they say you are a healer."

She was turned more than half-way from Neye, so he could see only a part of the side of her face. He could see the small muscles in her jaw, but they did not tighten at all. After a long time, with a slight sideways glance of disgust or impatience, she said, "Then the people of Bedyn are imbeciles."

"You deny it?"

She turned her head all the way round to him, gave him an unwavering stare. "In Bedyn they say people who work for Registry can read minds." And then she was the one who waited, watching him. If there was any fear under there, it was damn well secured. He could feel only the smooth, hard shimmer of her armor.

He smiled just a little, as though he was faintly tired of an old canard. "I don't read minds," he said. "Your scores are almost as high as mine. So you'll have to tell me if you are or are not a healer, I won't be able to pick it out of your brain."

There was no change in her face. But after a while he could feel her deciding to believe him. She looked away a little and said, "I've never seen anyone healed of anything just by the laying on of hands."

It was not a lie, only a careful choosing of words.

"I'm asking if you are a healer." Without hesitation, but also with-

out looking toward him, she shook her head, one hard, hostile denial. "No," she said. "I cannot heal."

"There's a scar on the inside of Jin's wrist." He had thought that would make her look round again. But she picked up a dish, scraped a bit of a flat cake — shellfish, he thought, or seaweed — and the rind of a tewit fruit into the garbage before she looked in his direction. She'd had time, he thought, to discover that look of weary impatience.

"A banguii ripped him with a pincer." That was all she said.

"The scar is very clean. Did you take him to Bedyn, to one of the meds there?"

"It closed up well," she said, and then for the second time looked straight at Neye with that sort of daring stare. "I gave him an antibiotic and a pressure bandage. That was the only magic."

Deliberately she looked around the room. But she made no move toward the two or three dirty plates or the cherar, gelled and cold in a dish on the table. Instead, in a moment, she kicked a pallet out flat and dimmed the light and then stood a moment above her bed, looking toward him in the near-darkness. "I don't suppose you plan to walk back in the dark. But don't try to sleep in any of my buildings. I'm up before dawn and I expect you to be gone by then."

"I'll stay a little longer than that,"

Neye said. He tried to say it gently, without much defiance.

She straightened but for a while said nothing. Then: "You have a permit to trespass."

"Yes."

"I want to see it."

"It's not case-specific. It's inclusive."

"I want to see it."

He did not argue. He said, "You'll have to show me to a comp."

She went past him out into the yard, and he followed her to another dobe, an office, where she waited behind him while he sat and punched his request into the desk. His number and his name came silently on the screen, and then the permit codes, one after the other, blinking on in rows. In a moment she said, "There is evidently little that you have not permission to do." She said it with no surprise, just a kind of sourness that was not directed at him.

He did not turn toward her.

"I want a hard copy of the permit to trespass," she said. She made it sound simple, straightforward, without the whine of its barren gesture. He touched a key, and a thin leaf of paper pushed out of the slot below the screen. She reached to take it, folded it once, and then, without interest, laid it on the desk top.

He was watching her now, sitting in the office chair but half-turned from the comp and leaning back on one elbow. She said, "I don't know what you intend. To catch me in the act? You could wait years here and not see a medical emergency, we both know that, and I don't think Registry has that kind of perseverance. You could make your own emergency, but I don't think they'd let you cut somebody's throat just to test me." She waited, as if the last part had been a question.

He said, "I'll just try to persuade you to stop hiding a scarce gift."

She seemed careful not to frown, to speak without even much curiosity. "You are so certain, then, that I'm lying."

He dipped his chin a little and in a moment raised it so he was looking at her squarely. "Pretty certain," he said, but again gently, without malice.

She stared at him. Finally, she said, "I won't feed you. I won't let you sleep in any of my buildings. I have that right."

"Yes."

She looked at him a little longer and then turned and went out ahead of him, back to her house. When he reached the doorway, she already lay on her side on the pallet with her back to him. He waited several minutes. He could hear her breathing and he was certain she was not sleeping. But when he spoke to her, when he said, "Lisel," there was no reply. So finally he left.

In the late dusk, now that Lisel had put out hers, there was only one

light showing. He went to it. The boy, Jin, made his quarters there in a tool shed behind a stack of plastic shipping crates. Unlike Lisel's, this space was bare and clean and the light was clear. If he had eaten, the dishes were already picked up, because now he sat on his pallet leaning back to the dobe wall with a hard copy pressed against his updrawn thighs. He raised his face to Neye as he came round the edge of the crates, then rather pointedly turned his attention back to the papers.

"I'd like to talk to you."

The boy didn't look up. But in a moment he said, "You need to talk to Lisel, I think. I'm only the apprentice."

"I want to talk to you, too. Can I sit down?"

He kept reading. After quite a while he said, "Suit yourself."

Neye put his duffel on the floor and sat beside it. For a while he watched the boy read from the bundle of thin pages. It was a slow way to take in information, but there was no sign of an auvid here, and he hadn't seen one in Lisel's place, either. All their money was tied up in good farm equipment—the big computerized raft, the late-model bylander, the rearing tanks humming inside that largest dobe. It was a fairly common set of priorities among ruralists. If there was money left over, they bought food—seaweed cakes and tewit, maybe—certainly not auvids.

"How long have you worked for Lisel?"

The boy kept his eyes on the print. "Four years."

"You were pretty young, then."
"I was twelve."

"How far did you get with the EDT?"

He glanced up at Neye. "I didn't drop out. I finished early."

"At twelve?"

"Yes."

"Marine husbandry?"

"Invertebrate biology."

Neye let his eyebrow slide up a little, let the boy see he was surprised, impressed. Hell, he *was* impressed.

"So how come you're here? There's a lot more money in research. And less risk."

"There are risks in the lab, they're just different. The wages are good out here, too, just a different currency." It ought to have been a cliché. But the boy spoke quietly, matter-offactly, so that it sounded only true. And it was at that point Neye began to take him more seriously. He may have been young and psy-blind, but apparently he wasn't simple.

In a moment Neye said, "You'll Master within the year, then. By that time Teath should be opened up to homesteaders. There's some good coastline there, I've seen the prospectus."

Jin smiled, holding up the pages in his hand, shaking them as they spread and fluttered winglike over his grip. "I've seen it, too," he said. "Lisel got me the hard copy." And in a moment, with a slight lifting of his chin: "It doesn't look that good to me."

Neye thought, before he said, "You seem to work well together. You and Lisel. Will you just stay here? Partner?"

Jin made a wordless grunting sound that was not yes or no. He pretended again to read the papers.

"You must be pliant. Working with her even this long. She strikes me as pretty rock-ribbed."

"You don't know anything about it." Jin didn't look up and there was no anger in his voice, just a faint raspy impatience.

Neye waited briefly. "She's a healer," he said then, without making it quite a question.

Now Jin's head came all the way up. There was a horizontal crease at the bridge of his nose, joining his brows in a single line. "Those people in Bedyn are harassing her again." His wasn't a question, either.

Neye was neutral, patient, persistent. "Registry says they get eight or ten complaints every year. They're not all from Bedyn."

The boy's face had reddened. "They're all from hypochondriacs and neurotics."

There was a weighted silence. Neye could feel the boy grappling with his agitation. It wasn't quite anger, or at least that wasn't all of it.

"The rumors started somewhere," Neye said.

"Sure. Her grandmother was a

healer." Jin gave him that shying sideward look of his. "You'd know that," he said, so there was no place to fit a denial. "It's supposed to skip generations, right? And Lisel is" — his eyes jumped down, then up again — "a private person. So every time some kid sticks a hand in a reaper and bleeds to death before the ambulance can get there, somebody says that damn reclusive bitch, Lisel, could have saved him."

No blood had been spilled when Cirant died. But something in what Jin had said, maybe just *kid* and *death* together in the same line, made Neye see suddenly, fleetingly, the face of his son. And raised in him an obscure irritability.

He let Jin sit silently for quite a while. Then finally he said, "There's only one clinic in Bedyn. You must know that. Two medics and one apprentice and one ambulance with an outdated robo-med. Over a hundred thousand square kilometers of farmshore and inland ranches. Eight thousand people —"

"I know what you're getting at," Jin said, shifting his weight on the pallet, looking impatiently at Neye and then away again.

Neye stiffened his tone of voice slightly. He said, "Just a minute. I want to finish this," and then he was silent while he waited for the boy's eyes to come around to him. "If Lisel has a healing gift, she's required by law to register it with the local Med team. Maybe someplace else, or under other circumstances, it wouldn't be very important. Probably Registry wouldn't have sent anybody out the first time, let alone the third. But here, yes, it's important. And there's something more at stake than just compliance with the law. That is what I'm getting at."

He fell silent again, briefly, but he was still looking at Jin. Then he said, "Did she repair your wrist?"

The boy put both hands in his lap so the rise of his knees hid them from Neye. Maybe he was rubbing the white scar along the inside of his wrist. He was steady now, not restless anymore, but there was, again, a deep crosswise crease at the bridge of his nose, a frown. "She dressed it, ves," he said. "There wasn't any laving on of hands, if that's what you mean. I'm sorry for it, but those people just won't find any help for their problem here." And then, with only a little shift of tension to betray him, the earnest lie: "Because Lisel isn't gifted. She's not a healer."

She came silently and alone from her house into the thin darkness before sunrise. The sky hung down in shaggy ribbons, low and lead-colored and damp. She pulled her arms inside the sleeves of her shirt and padded soundlessly to the nursery building, with her breath pluming out white in front of her and then scattering

around her shoulders as she walked through it. Neye watched her from the rise of dune behind the house, sitting hunched on the grass where it had been beaten down under his little khirtz tent. There was no light yet in the shed, no sign of Jin, and it occurred to him that Lisel had reserved the cottony quiet, the grayness, the solitude of these dawns for herself.

When she came out again from the nursery, the sky had lightened but the opaque fog filled all the distances. There was no seeing the rocky headlands of the cove nor even the bylander anchored between those fleshless arms. She stood a moment looking out toward the smoky water, and then went over the rise toward the tide pond. She went in bare feet, bare calves, through the grass that was bent over heavy with wet and chill. The tide was out, the pond a dark smudge, muddy, crosshatched with posts and rails, maybe waiting for a new batch of young mollusks to graduate from the settling tank in the nursery.

Neye watched her take tools from a little cachebox near the ingress pipe and squat on her heels in the mud in front of the orifice. She was retiling around the opening. He watched her quite a while. She worked slowly, with care, chipping out the broken pieces round the mouth and then fitting the new ones, mortaring them in carefully so there was a smooth, clean lip at the opening. When she finished,

she stepped back to the edge of the wet sand and looked across at her work. In some places there had been no tiles broken at all, at others one or two or three deep into the conduit. The older tiles were dark, the new ones stark white, so even from his distance Neve could see the abstract pattern, the notching line going around the circle of the opening. Lisel stepped back across the mud, squatted again, and felt all around the aperture with the tips of her fingers. Watching her, Neve could almost feel, with his own hands, the utter smoothness. The only irregularity would be the one presented to the eye, light butting against dark. Under her fingertips, the tiles would make a seamless whole, a ring.

She stood again and stowed away the tools and then wiped her damp palms on her trousers. He would like to have seen her face, to know if the tiling — both doing it and seeing it done — had softened the lines around her mouth.

She walked out along the sunken mark of the conduit, between the crouching dunes to the shoreline of the cove. With the tide out, the cobb racks stood above the water, algaedark, crusted and knobby with adult mollusks. Jin was there on the dark mud flats beside the piers. He had come down, with his shoulders hunched and his face bleary with sleep, while Lisel worked at the pond ingress. Now he had the mop lying on

its face with the back off, was tighting or untightening something in the motor.

Lisel said a couple of words. From the distance they were only blurred sounds, indistinct, but they had not the inflection of a greeting. Perhaps a question. Jin spoke a wordless grunting sound in reply. He didn't lift his head. Lisel went past him to the cobb racks, began to stride up and down between the vertical rows of lattice. They ranged parallel to the shore so the first row had its footings in the mud, the last knee-deep in the sea. She went between them, one after the other, wading finally to her hips in the water along the far rack. Probably, while the tide was low, she looked for the little infectious shell lesions that could bring a cobb crop to ruin.

She began to wade back along the ends of the racks, pushing long-legged through the water so it raised a white surf against her thighs. Jin was standing now, watching the mop move up the first row to scour the bottom sand for predators and parasites, but she did not look toward him or the machine. She lifted her face so that she seemed to look up straight and sudden to Neye. He was too far from her to see her eyes. In a moment she looked away.

He spent a good part of the morning working his way along the rocks on the southern headland to its point,

and from there he could see the bubblefence that closed the mouth of the cove. Evidently that was what they were inspecting or repairing, diving as before, alternately, from the raft just inside the fence line.

The wind was cold and wet, and there was no seeing the north end of the breakwater through the rags of low fog. But, cautiously, he went a little way out on the jetty, stepping with care along the top of the narrow wall, and then finally sitting on it with his feet hanging on the inland side and his back to the open ocean. The raft crept steadily from the north end of the fence toward the southern. and if he stayed where he was, they would eventually work within a few meters of him. For now, from where he sat, he could see the first two or three strokes of their arms, the scissoring of their legs, when they went into the water.

The two of them seemed not to notice that the weather had changed. They wore again only their knee pants and lay alternately on the raft as though the sun warmed its plastic decking. The water would be temperate, but Neye found little solace in that: he sat uncomfortably on the breakwater, hunching his back against the chill overspray of surf breaking high and white on the seawall behind him.

Neither Jin nor Lisel looked toward him. But if there was annoyance or furtiveness in the woman, he could not see it. They simply, steadily worked south along the fence line as if he were not there above them, watching. Infrequently, they spoke, but only to one another. There would have been no hearing it anyway, over the noise of the surf, but sometimes from the shape of their mouths he knew a word or two, knew they spoke of the perforated pipe strung below them on the seafloor, the red keefish. one tool or another. He did not see his own name spoken. Once, maybe, Jin asked if she was hungry, and she shook her head, spraying beads of water from the bristly ends of her hair.

Probably it was close to the way they worked when they were alone. But they did not smile, never touched except to clasp hands hauling one another up onto the raft. And he had a sense of that much being false, a closed face they were turning to him. They were not lovers, maybe even did not love one another. But there was comfortableness between them, a familiarity that was at least affection, and he thought Lisel was trying to protect that from him. As if it were a frailty he would exploit. Maybe it was Jin's throat she thought he would cut.

There was no mark of the sun this time to end their day. In a smoky dusk they worked until they finished, following the fence line all the way to the rocky headland. When the raft bumped its nose against the crags,

they quit and lay together as they had the day before, stretched on their backs, while the flatboat rocked under them in a wet wind.

Neye climbed back along the seawall to the point of the cape and stood just above the raft awhile, watching them. But he was cold and stiff and finally he started back, picking a way along the stony foreland to the beach. He was careful. In the wet darkening, among the broken rocks, he found a place for each step before he let his weight down on it.

Once, he stood a moment and looked back at Lisel, waiting for some of the tautness to go out of his shoulders. She and the boy were stowing gear in the skiff now. From this distance, in the vague light, they both seemed frail and young, their movements thickened by weariness. He imagined he saw a little of Cirant, again, in the boy's thin shape silhouetted against the water.

He began again to climb down and in toward the beach, toward the dark curve of sand where the tide, withdrawing, had left an erratic line of spume and seaweed. He steadied himself with his hands. The stones under his palms were cold and slick.

He didn't fall until he was at the edge of the beach. He jumped the last little way from the rock, and his heel came down flat and then skewed sideways off some turtleback stone there under the skin of sand. There was a blur of darkened shapes and the sky

sliding high up, tinted red through the lens of his pain, and then the grit of sand in his mouth. He held his knee with both hands, curling around it on his side with his cheek against the ground. He lay staring out at the sea, breathing carefully and holding his body very still and staring out at the low sky, and the water under it, leaden in the darkness. He held his knee tightly with both hands.

After a while someone came. He felt the slight rasp of feet on the sand, saw a bare foot and then Jin, bending to see him.

"You fell." Not a question. In the darkness, the wind raised the boy's hair so it made a soft russet crown around his head.

Neye pushed sand out of his mouth with his tongue. When he could, he said, "O.K. Be O.K. Minute."

Jin squatted near him. His hand reached for Neye's knee.

"Don't! Touch!"

The boy rocked back on his haunches, folded his arms on his chest, across the long yellow tunic blotched with wetness. "You might have broken something."

"No. Did'n' break." He had slipped the knee once before. He thought he should say that. To explain. But it was too many words to push out of his chest. He wanted to close his eyes. But the boy was still there, watching.

"You look pretty pale." Jin said, and inside his skull Neye could feel

the light wordless sing of the boy's compassion.

He held his knee tightly and pushed himself with his left arm to sit. With his teeth clamped down hard against the sound he might have made. In a while he was able to say, "Go on back. I'm O.K." He thought he said it all right. The faint high whine was in the front of his head, behind his eyes.

The boy made no move to go. He squatted watching, with his eyebrows cramped together. Behind him, the skiff was drawn up a little way on the sand. And beyond that, a hundred meters back along the rock shore, Lisel squatted waiting on the raft. She did not look toward them. She sat on her heels with her arms clasped round her knees, while she looked out at the water.

Maybe the boy saw him looking. He said, "She thought maybe it was ... a ruse or something. You understand?"

Neye squeezed his hand carefully against his leg and then bent the knee slightly, testing, putting a little weight on the heel of his foot. Then he swung his good leg under him and rose to that knee, with the other leg extended stiffly out.

"Can I help you?" Jin was standing again, but bent over him with his palms on his thighs.

"No."

He pushed up hard on the good knee with the heel of his other foot

braced against the ground. He almost made it up. But the dark sky slipped off sideways, and he felt Jin's hands taking hold of him, buttressing him as he tottered. Neye leaned against the boy and waited until the line of the sea came level.

"Thanks," he said, when his breathing had leveled out, too. He made as if to stand away, but the boy's hands gripped him tightly.

"I'll help you to the boat."

He took in a breath carefully, so it made no sound. "No. I just slipped the knee. It'll loosen up. If I walk on it."

Jin let go with one hand so he could push the wet red hair back from his forehead. With his other hand he continued to hold Neye's arm. "You're in a lot of pain," he said. "Don't let Lisel —"

"Go on back," Neye said. He looked down at the beach, past the skiff and the raft and the woman to the headland bulking dark against the horizon.

Jin let his hand drop from Neye. "I'm sorry about her. She just...." He made a loose gesture as if, with that, he explained something.

"Go on back." Neye was squeezing his thigh with one hand but he thought he was standing pretty straight. He just did not quite put all his weight on the leg. Not while the boy was there.

After a while Jin said, "O.K." But it was a little while more before he

went away, pushing the skiff so it grated quietly off the sand.

Neve took a step. And again. He was sweating softly, grinding his teeth. Behind him he heard Jin and then Lisel, no words, just the hissing sounds of their anger. He pushed his leg out and out and out, stepping along the dark sand. Then he heard the skiff. the faint slip of it going through the water, slanting across the cove toward the buildings grown suddenly more distant. He did not look that way. Not at the boat. Not at the buildings. He watched his feet, the prints they made in the sand. He squeezed his leg high above the pain and pushed it out and out, following the strand of pale beach that went away ahead of him into the darkness

here was a khirtz tent in his duffel, but he had not the strength to inflate it. So he'd lain on the grass on the lee side of Jin's shed and pulled a plastex sheet about him and slept that way, curled around the pain. At dawn Jin came and stood over him. He did not hear the boy's feet in the grass, only felt him there suddenly and opened his eyes to the narrow shape he made against the sky, against the colorless morning.

"You're O.K.," Jin said.

"Yes."

The boy shifted his weight, Finally, he squatted down beside Neye with his palms together, pressed between

his knees. "I heard you come up from the beach last night." There was something he wanted to say, maybe another apology on behalf of Lisel. But while Neye waited for him to push it out, she came toward them up the path from the cobb racks, and when the boy saw her, he stood and pushed his hands in the pocket of his shirt. He and Lisel were both stiff-faced. She looked at him once, glancingly, and then dropped her eyes to Neye.

"Registry must have come on hard times," she said, so it was harsh and scoffing. "Or have they always taken the lame and halt in their service?"

He was almost too tired for anger. In a little while he made a sound, a slight release of air. And he pushed against his hands to sit up. He was very careful. He did not think there was much change in his face. But his hair had come free of its clasp and when it swung forward across his cheeks in a dark, loose drape, he didn't push it back. Without looking at her, he said, "If it becomes a chronic problem, they will probably ask me to get a plastic knee. In the interim, I'll try to be more careful." There was anger now, a little, in what he said. He braced one leg out stiffly, pushing up on the other to stand. He had thought he might need to put his hand against the wall of the shed to prop himself. But he stood unsupported, straight, looking at her again from beneath the thick forelock of his hair. Then he looked away. "No

one," he said. He looked at her. "Is responsible for my health. No one but me."

He could not feel in her any sense of regret. Certainly none of apology. But he'd taken the latter possibility from her, and maybe she was feeling its unexpected loss. Because she stirred a little with discomfort.

"Even if I were a healer, I could not rebuild a knee. It's only the autonomic nervous system that they —"

He pushed his hand through the air in a cutting-off gesture of impatience. "I know what they can do." He was aching and very tired and he did not care that her face flared with annoyance. In a moment he said, "If I want my knee repaired, I'll have a surgeon do it. If I'm in pain, I'll take a drug. There's nothing I want from you but obedience to the law. If you have a healing gift, register it. Make yourself available in emergencies. I don't want anything else."

There was only sullenness in her face. And she went on past him then, silently. But he had felt, for a moment, a surprising needle-pointed sliver of her anguish. And found, with another kind of surprise, that there was no pleasure, no triumph in it, only uneasiness.

Jin had stood silently beside him with his hands in his pocket and his eyes fixed on his feet. Now, with Lisel gone, he looked diffidently at Neye. "Did you ever know anyone who was a healer?"

Neye shook his head. He had seen, once, a healing. A man had touched a woman who was bleeding from an artery. He had put both his hands on her, on the hole in her neck, and in a moment she had stopped spurting blood. By the time the ambulance came, there was a thin brown scab on the wound. He was still thinking of that, seeing it, when Jin said, "Her father's mother was a healer. I told you that. Well, she died of old age, essentially, when Lisel was ten or eleven. At fifty-three. Which is how old Lisel is now."

Neye looked at the boy. His chest began to feel heavy, as if from fatigue.

"She was a metallurgist," Jin said. "Three or four times in the lab she used her gifts — burns, probably, but Lisel didn't say. And a couple of times, other places, when she just happened to be there. Once I guess a bus hit a downdraft and crashed on the footway right in front of her house. Maybe there were a dozen times, altogether, that she ... was useful. But. Every day. There were these people who came. Amputees wanting her to regenerate tissue. Quadriplegics. Every terminal and incurable and hypochondriac on the continent. They'd stand around her door when she'd come out or go in and they'd touch her, grab at her sleeve or her wrist, like they thought that would do the healing, like she was a holy font and all they had to do was put their hands in the water. Because it isn't medicine, after all, is it?

It smells supernatural or something, and that's what would draw them. Still draws them. She'd explain it to them, or sometimes I guess she'd have to try first, and afterward she'd explain. But they were never angry. They'd just thank her and go away, all quiet, with their shoulders pulled in, and the next day another one of them would be there waiting by her door. They just ... wore her out. One by one. By the time she was fifty-three."

Neye stood hunched as if he protected himself from blows. He was able to see, still, the woman with the hole in her throat, the man's small blunt hands touching her. So he was able to wait, steadily and stubbornly, until he was sure the boy had finished. Then he looked up.

"It's a great gift," Neye said, as though that needed no proving. "If I had it, I would maybe have felt it worth the trade-offs. And I think Lisel never asked her that, her father's mother. Whether she thought it was worth it." But behind his eyes, irresistibly, he saw the others: the thin, solemn face of Cirant, his son, who would surely have died anyway, like the ones who waited before the door of Lisel's grandmother. And the face, too, of that grandmother, graven with unendurable, endless griefs.

Now that they had done with the fence, Lisel and the boy began to work the reefs, culling out the old, exhausted banguii and replanting

with freezer-fresh "seed."

The cove held at least a million and a half cubic meters of cropland, artificial reefs, all planted to banguii. The cobb growing on those racks in the shallows would be a high-yield investment if they made it to harvest, but they were notoriously difficult to raise — vulnerable to disease and several kinds of predators and, sitting up high that way in shallow water, prey to storm damage and drought. The banguii was the money crop.

Twice a year their legs could be harvested, all six legs behind the forward clapperclaws, and they'd simply grow new ones, and continue to do so over a useful life-span of four or five years, while the legs diminished in size a little with every cutting. It was necessary only to feed them keefish, and the kee were easy to grow, generally needing only a bubblefence to keep them in and a pelleted food that could be pressed from banguii by-products and seaweed. The kee's other predators, larger and quicker and able to wipe out a school at one meal, seldom hazarded the small pores of reefs or the aggressive pincers of banguii. It was a neat, selfsustaining microecology, so wherever the offshore was suited, it was a prevalent companion cropping.

Lisel had planted successively, with all of the oldest crop bunched just shoreward of the fence line along the north margin of the cove. Neve could follow the stream of bubbles

from the submersible reaper, crosshatching back and forth there between the rocks of the northern headland and the anchored bylander. But neither of them rode in the reaper. They followed behind it, seeding by hand, working as ever from the raft, while the submersible found its own way up and down the furrows between the reefs.

Neye did not climb out to the rocks to watch them. His knee was hurting him. And he thought her fear might be old and stiffened. He wanted to let her alone a little, back away, let her come in on her own if she would. So for quite a while he sat as he had the first day, watching them benignly from the salt grass of the dunes above the buildings.

The storm stood just off the coast. There was a light wind at sea level, lifting spray so the air was chill and damp, but there was little rain and no gale. He thought maybe the front would after all slide north and past them. Still, it was cold sitting high and idle there, and he could see little of Lisel from this distance. So finally, in the afternoon, he went down and heated coffee and sat with his back against one of her buildings and his hands wrapped around the warmth of the cup.

He had assumed they would work until the light failed. But as he sat bored and faintly glum with a gelid pack on his knee, the boy came alone up the slope from the beach. Neye had, the day before, thought both of them indifferent to the cold. But now he was near enough to see the cracks in Jin's lips, and the roughened skin of his arms.

The boy gestured toward Neye's outstretched leg. "O.K.?"

Neye tore off the pack, flexed his knee, and pushed to stand, as though there was no pain. "Yes. All right now."

Jin made a stiff smile. "Sure." And went on past him to one of the dobes, came out again with a couple of amphibious drone carts set up to haul something — many somethings — tall and thin and vertical.

"I thought you were replanting."

Jin had already started the carts down toward the cobb beach, and Neye, following, pushed his leg longstrided to keep up. The boy flapped one hand vaguely toward the overcast. "We thought this would roll by us. It was supposed to. But now Lisel thinks it's coming in, and she's usually right. So we'll move the cobb. As many as we can before the weather turns, or the tide, whichever is first. They drift, you know. When there's a heavy sea, they just let go and drift until things calm down, and then the ones that don't end up high and dry set up housekeeping in the new neighborhood. You can lose a whole crop that way."

He seemed not much worried, at least not yet, just in a hurry. He and the carts and Neye, trailing, went quickly down through the dunes to the beach where Lisel was already wading out among the rows of cobb. The racks came apart from the piers in their original settling tank configuration, big open frames gridded with crosspieces, all the surfaces spangled dark with the knobby, algae-slick shell backs of mollusks. The tide was out. or nearly so, and Lisel worked the outermost row first, standing to her chest in the water, then climbing the piers, uncoupling the latches there and lifting the frames out and down. one by one, pushing them through the water to Jin, who stacked them upright between the struts of a cart.

For a while Neye stood on the dry sand above the mud flats, watching them. He couldn't see that the weather had worsened at all, maybe had even lightened. And his knee was aching, not greatly but steadily. And Lisel seemed not to see him there. So for a while he only stood and watched.

But when they'd filled a cart, Jin followed it up out of the water and along the trough of dunes to the tide pond. And while he was there, offloading, Lisel worked the other end alone, lifting a frame out and then balancing it with one hand, climbing down laboriously herself to put it on the cart. Neye watched her do that three or four times. Then he went across the low rise to the tide pond, going all the way out on the mud to where the boy was hanging racks on the low piers.

"Go on," he said. "I'll send the cart back when I get it unloaded."

Jin looked at him once, not very surprised, not speaking, and went off at a trot. After that Neye saw only the drones as they purred up the sand from the beach, one and then the other, freighted with slick, wet racks of mollusks.

The pond was meant to hold only the young spat, the graduating class from a settling tank; there were four or five times as many racks of cobb out in the cove as there were piers here in the pond. So when the hanging space was gone, he began to set the racks between rows, leaning them to rest on the others. The racks were plastic. Naked, they'd have been light. But they were crusted heavy with shellfish, and his shoulders and arms began gradually to ache from the monotonous, relentless lifting.

He was just beginning the third rank and the incoming tide stood to his thighs, when Lisel came, walking in to him not from the mud flats but from the low rise that sheltered her buildings. She toted an insulated bag, holding it against her body as if it were too heavy to hang by the handle.

"You can eat with us," she said, without quite looking toward him. She walked on past the pond and along the beaten-down track of the drones.

Neye leaned a rack against the others and wiped his hands on his shirt and followed her, splashing up

52

out of the water and through the last rise down to the beach. Jin was lying on the grass there, on his belly, with his head on one arm. Lisel squatted by him and began to haul food out of her bag, a couple of tall bottles, hunks of smoked fish, round stones of bread. She brought out a knife, too, sliced a tewit in half, put part of it in the hand Jin outstretched to her. And then, with a stiff gesture, she offered the other half of the tewit to Neye.

He took it and sat on the damp grass a little way from her, with his legs drawn up in front of him. He would like to have rubbed the ache from his knees. But he kneaded, instead, his stiffened shoulders, first one and then the other, with the fingertips of his free hand while he ate the tewit and looked out at the cobb racks. Not quite half of them were skeletal piers.

Jin was propped up on his elbows now, his mouth and chin stained with the green juice of the fruit. He took a mug of coffee from Lisel and held it between his two hands.

"I'll bring the lights down here," he said to her. "After we eat." She nodded. She was cutting cheese.

Neye had not been much aware of the failure of daylight, only now saw that before the tide pushed over the last of the racks, it would be dead dark. And there was a little wind, seeming sleety cold against his wet clothes. The leading edge of Lisel's storm. She handed him coffee, pushed some of the food in his direction, and then herself began to eat, sitting cross-legged more or less between Jin and Neye.

"I think she was worried about hypothermia," Jin said, with his voice low as if he spoke a confidence, but leaning out past her to say it to Neye. "Otherwise, we'd never have been fed."

She did not bother to look at him. "You could eat shit," she said, so it had almost the sound of well-meant advice.

Jin was still looking past her to Neye as he said, "The first symptom is unprovoked hostility." Still privately, as if she did not sit there between them.

Around the food, she made some grumping sounds, perhaps an obscenity, but also clearly a private message, a cutting off. *Enough*.

And Jin obliged her by falling silent. But in a while they exchanged a look of gentle amusement, of affection, and Neye, watching them both obliquely while he ate, surprised himself by feeling only faintly excluded.

in brought sodium lamps on high telescoping stands, and they worked a while longer in that insufficient, long-shadowed glare. But the wind was rising, and a dark, cold rain rode in on it. The tide pushed in, too, until it slopped over the tops of the piers in the pond. Neve waded in it to his armpits. The water was dark, and sometimes he had to feel with his hands even to find the drone cart standing waiting in the water beside him.

He did not hear Jin coming, only heard him say, "We're quitting," and he turned, he could see the boy in the wind-shaky light standing at the edge of the pond, leaning on a cart burdened down with lamp heads and collapsed uprights. Behind him, Lisel came slowly up the path from the darkened beach, carrying a sheaf of poles in her arms. She kept her eyes on her feet as if she needed to remind them to move.

Neye sent the cart up out of the pond and waded up after it. Jin was already dismantling the two lamps there, and Neye found he could only stand lumpishly and watch, could not quite summon the energy to help. Now that he was out of the water, he was acutely aware of his hands, swollen thick and numb.

In darkness, finally, and windy silence, they crossed the little rise of grass and went down among the farm buildings. Neye fumbled with his stiffened hands to help the two of them stow away the carts and the lamp pieces in one of the sheds. But when Lisel looked at him with a sort of disgusted embarrassment, he was not surprised.

She said, "You can take a shower and sleep inside, I guess." It was only

a little grudging. And certainly he was too tired to be other than relieved.

"We left the raft out where we were planting," Jin said. "Maybe we should bring it in."

She made a hissing sound through her teeth. "Shit. I forgot about that." Her shoulders seemed to drop a little, and it was that, more than the words she'd spoken, that reminded him: while he had drunk coffee and rested his knee, they'd been diving in the cove.

With some care, so it was a straightforward question, he said, "Is it worth going out again?"

Lisel gave him a perfunctory glance, then said, "It's a cybernetic," and looked back at Jin. "I want to put on a dry shirt, at least. I'll see you down at the skiff." She went past Neye into the windy darkness.

To Jin, when it occurred to him, he said, "Is it anchored? Maybe it would just ride out the swells, like a boat would, as long as it's out on the open water."

Jin shook his head. "It's so damned underpowered. The anchor mode probably wouldn't hold it in a gale, and then it would end up on the rocks."

Neye followed him through the rain to his building, stood self-consciously beside the shipping crates while the boy peeled off his sodden shirt and looked for a dry one. His own arms felt clammy and cold. He could hear the wind-pushed raih

sheeting off the roof of the dobe, could feel the heat in the room and its dry comfort. He did not want to go out again.

Finally, Jin looked toward him. He had put on the bright yellow tunic. His forearms below the edge of the sleeves seemed thin, knob-wristed, pale. The fine hair stood out with the cold. "Stay put," he said. "Get a hot bath. You look like your body heat is really down."

Neye had seen the raft at a fairly close range. He thought it would take at least the three of them to horse it up out of the water. But the boy spoke matter-of-factly. As if what he said should be indisputable. So hell. Maybe he would just stay inside.

Jin went out, and for a while Neye stood leaning against the crates. He could hear rain running down through cistern pipes to the underground, the wind whumping against the outer wall of the dobe. But after a while he went out, too.

He put his head down and pushed a way along the slick, wet path toward the tide pond. It was very dark, and the rain beat almost horizontally against his lowered head. He placed his feet carefully in the puddles, between the dank tufts of grass. If he fell now, there would be no one to see it. From the top of the rise, he could see the ocean leaking into the pond along the low notch between the dunes, running thin and fast as snowmelt there where the drone carts

had earlier worn marks in the grass. So he turned and went up the steep, pathless slope of the seaward dune, stepping carefully in the darkness, heel first, sliding a little on the wet grass. From the crest he peered against wind-driven rain out at the sweep of cove. The sea was breaking just above the tidemark in narrow florescent lines of surf.

It was lin's vellow shirt and Lisel's sand-colored one that he saw, finally, against the darkness. They were not very far below him, bailing rainwater out of the skiff. He thought of waiting, watching them from here. Or going back. They had surely pulled out the raft before, just the two of them. And Lisel might see it only as an extravagant and insincere gesture. But he started over the hill and down to where they were dragging the skiff seaward. As he helped them push the prow out into the swells, he saw Lisel's face turn, a pale glance of surprise, no more than that. But it was Jin's hand he felt boosting him up when he had trouble getting his leg over the gunwale into the boat.

They did not speak to one another. He crouched in the sloppy water between thwarts, with his hands gripping the ribs of the bottom and the thrum of the little engine coming up through his fingers.

In the darkness on the choppy water, he could not see the raft, but he thought he knew where it lay, just off the fence line at the point of the north

cape. He watched the headland rise like an edge of sky, high and black above the black water. In its shadow, in a wet crosswind, they plied back and forth looking for the raft, saw it finally, low and awash, west of them and just off the rocks.

lin turned the stern to the wind so they could come alongside, and when their port side scraped the fiber glass timbers, Lisel went over the edge, crawling out on the heaving deck to secure the line and then as quickly back again. As she crabbed over into the boat, the sea swelled under them both, and for a moment she teetered above the water. Neve grabbed for her, caught his hand in her shirt, but she was already in the boat, had never lost her balance. In the darkness he saw her looking back at him gently, perhaps with amusement.

The raft was heavy and cumbrous, three or four times as big as the skiff. They towed it endlessly through the darkness. The wind out of the southeast pushed them always north, so Jin finally turned them that way, toward any part of the beach where they could safely push the raft up out of the water. Neye sat hunched behind Lisel, peering against the rain. His eyes had begun to burn a little, but he sought the black line of the shore. Finally, above the sea there was a bumpy, dark rise, the dunes.

Neye crouched on his heels in the bottom of the boat. He put one hand

on a gunwale. In front of him he could see the faint ridge of Lisel's spine stiffening under her tunic.

When the skiff rose on the first comber of surf, Neye went over the side with her. He thought he would be able to stand. Instead, he sank, and the tide sucked him sideways and down. He was not much aware of the cold, only the utter blackness. His hand touched the skiff, felt it sliding by him, borne in on the water.

The sea swelled again, pushed him hard against the side of the boat, and he grabbed with both hands, hugged it to him. When his head and shoulders broke above the water, he could see through the smear of wet Jin, belatedly clambering over the port side, and Lisel in front of him in the water with one arm clasped over the gunwale. Once, her face turned to look for him, to be sure he was there.

The bottom of Neye's feet rubbed the sand. Ahead of him Lisel tried to run, chest-deep in the water, pulling the boat up with her or the reverse. Neye set his heels down hard, but there was no running, only a sluggish, torpid sort of striving against the sea.

Maybe Jin yelled. But there were no words. Neye only felt the sudden bright burn of the boy's alarm.

Across the gunwale he could see the tight cap of the boy's hair, plastered so the scalp seemed bare and burnished. And behind him, the raft, skewed on its towline, coming up on a white line of surf. Gently its rear end lifted high on the water, and it began to come in, quick and light as a chip of wood.

He did not feel the raft ride down on top of them all. He felt only a sudden unbearable heaviness in his chest. Afterward he was cold, and he thought someone was twisting his leg, or jumping on it, to make it hurt that much.

He said, "Don't," he velled it, and the sea filled his mouth. It was very dark, and there was sand in his eyes and his teeth. Sometimes the water was not deep, and then he tried to crawl up out of it. He did that several times. After a while someone - it was Lisel - came and put her shoulder under him and hoisted him up. He wanted to help her. But she staggered up out of the water carrying his whole weight across her back. He could hear the sobbing gasp of her breath, could hear it even over the boom of the ocean. O.K., he wanted to say. I'm O.K. Put me down. But he did not know what sound would come out if he opened his mouth.

She let him down, or dropped him, on gravelly sand, on his back, so the rain falling out of the darkness struck his face and ran in his ears. He lay partly across one of her arms or a leg, and she tugged it out with a fierce, whistly sound like a wail. He heard her feet go away again, running across the sand, and after that he lay alone in the cold, loud darkness. His head hurt, and hurt more when he



vomited thin dribbles of salt water.

He was alone quite a while before he remembered Jin. He sat up and then, a little later, stood. There was something broken or rent, this time, in his knee. And sticky blood in his eyebrows. But he went down deliberately toward the water.

She had brought the boy most of the way out of the breakers, but then probably she had dropped him and not been able to get him up again. She was hunched over on her knees, with his head in her lap so his face was off the sand and out of the shallow foam of spent surf.

Neve braced his leg and bent for one of the boy's arms.

"Here," he said.

Lisel looked up at him abstracted-

ly. There were bluish arcs like bruises beneath the bones of her cheeks. She stood and took Jin's other arm, and they dragged him up, all the way up, out of the water. The boy's heels scuffed a pale furrow in the sand. At the edge of the hill, Lisel sat again and put Jin's head in her lap, and Neye lowered himself to the grass beside her. He did not look at Jin. He peered out at the dark ink line of the horizon. A bead of blood ran down from his eyebrow, alongside his nose.

"He was already dead," Lisel said after a while. "I went out to him first, but he was already dead. So I left him while I went to look for you." A little later, as if she thought it would comfort him, she repeated: "He was already dead." And then, as if she

Seaborne 57

thought to comfort herself: "I couldn't have helped him."

The boy's head was in her lap, she was holding him by the shoulders, but she didn't look at him. She looked sideways, away from Neye, up the dark curve of beach. He could see only part of her face, a corner of mouth pulled in like a little drawstring purse.

Before too long, she put one hand under Jin's head and lifted it and slid out from under him. When she stood up, Neye could see the dark shine of blood on her hand. She didn't wipe it off. She said, "It'll take a while. I'll have to go clear around on foot to tele for the ambulance."

He thought she was asking him, so he said, "I can wait," and in a little bit, solemnly, she nodded and started off along the beach. He didn't want to watch her going away, so he closed his eyes. And then, carefully, he lay beside Jin, on his side, curled a little. The wind blew wet against his spine.

He didn't hear Lisel come back to him. But when he opened his eyes, she was there, squatting beside him. He felt she had been waiting several minutes. He was the only one of them who was crying. But the tightness, the pain in Neye's skull now was hers.

"There isn't much I can do for the knee," she said. As if it were only something she had forgotten to say. "I could make it quit hurting, but you'd have to be careful. If you walked on it or turned it the wrong way, you could injure yourself more."

He did not answer right away. When he did, he just said, "No."

She looked at him as Jin sometimes had, sideways, as if she looked away. There was a quality of reticence about it, or of shyness, that he had not seen in her before. Abruptly, he knew what she would do. When her hand came out, reaching for the bleeding place above his eye, he reached, too, clasping her lightly by the wrist.

"Don't," he said. "It doesn't hurt." There was a hardness at the back of his throat so the words came out squeezed and small.

There were beads of rain or of the sea in her eyelashes. She let him hold her that way, briefly, and then, with only a small change in her face, she pulled her hand free of him.

"Yes," she said. "It does." And she touched his eye. Denying, gently, several things at once.



Lawrence Block is best known as a writer of mysteries (he has been published by Arbor House, Pocketbook and Jove). "The Boy Who Disappeared Clouds" marks his first appearance in F&SF. It is a story about a gift given and what is, and what may be, done with it.

## The Boy Who Disappeared Clouds

## BY LAWRENCE BLOCK

eremy's desk was at the left end of the fifth or six rows. Alphabetical order had put him in precisely the desk he would have selected for himself, as far back as you could get without being in the last row. And the last row was no good, because there were things you were called upon to do when you were in the last row. Sometimes papers were passed to the back of the room, for example, and the kids in the last row brought them all forward to the teacher. In the fifth row, you were spared all that

And, because he was on the end, and the left end at that, he had the window to look out of. He looked out of it now, watching a car brake almost to a stop, then accelerate across the intersection. You were supposed to come to a full stop, but hardly anybody ever did, not unless there

were other cars or a crossing guard around. They probably figured nobody was looking, he thought, and he liked the idea that they were unaware that he was watching them.

He sensed that Ms. Winspear had left her desk, and turned to see her standing a third of the way up the aisle. He faced forward, paying attention, and when her eyes reached his, he looked a little off to the left.

When she returned to the front of the room and wrote on the black-board, he shifted in his seat and looked out the window again. A woman was being pulled down the street by a large black and white dog. Jeremy watched until they turned a corner and moved out of sight, watched another car not quite stop for the stop sign, then raised his eyes to watch a cloud floating free and untouched in the open blue sky.

"Lots of kids look out the window," Cory Buckman said. "Sometimes I'll hear myself, standing in front of them and droning on and on, and I'll wonder why they're not all lined up at the windows with their noses pressed against the glass. Wouldn't you rather watch paint dry than hear me explain quadratic equations?"

"I used to know how to solve quadratic equations," Janice Winspear said, "and now I'm not even sure what they are. I know lots of kids look out the window. Jeremy's different."

"How?"

"Oh, I don't know." She took a sip of coffee, put her cup down. "You know what he is? He's a nice quiet boy."

"That has a ring to it. Page five of the *Daily News:* "He was always a nice quiet boy," the neighbors said. "Nobody ever dreamed he would do something like this." 'Is that the sort of thing you mean?"

"I don't think he's about to murder his parents in their beds, although I wouldn't be surprised if he wanted to."

"Oh?"

She nodded. "Jeremy's the youngest of four children. The father drinks and beats his wife, and the abuse gets passed on down the line, some of it verbal and some of it physical. Jeremy's at the end of the line."

"And he gets beaten?"

"He came to school in the fall with his wrist in a cast. He said he fell, and it's possible he did. But he fits the pattern of an abused child. And he doesn't have anything to balance the lack of affection in the home."

"How are his grades?"

"All right. He's bright enough to get C's and B's without paying attention. He never raises his hand. When I call on him, he knows the answer—if he knows the question."

"How does he get along with the other kids?"

"They barely know he exists." She looked across the small table at Cory. "And that's in the sixth grade. Next year he'll be in junior high, with classes twice the size of mine and a different teacher for every subject."

"And three years after that, he'll be in senior high, where I can try teaching him quadratic equations. Unless he does something first to get himself locked up."

"I'm not afraid he'll get locked up, not really. I'm just afraid he'll get lost."

"How is he at sports?"

"Hopeless. The last one chosen for teams in gym class, and he doesn't stay around for afterschool games."

"I don't blame him. Any other interests? A stamp collection? A chemistry set?"

"I don't think he could get to have anything in that house," she said. "I had his older brothers in my class over the years, and they were monsters."

"Unlike our nice, quiet boy."

"That's right. If he had anything, they'd take it away from him. Or smash it."

"In that case," he said, "what you've got to give him is something nobody can take away. Why don't you teach him how to disappear clouds?"

"How to-?"

"Disappear clouds. Stare at them and make them disappear."

"Oh?" She arched an eyebrow. "You can do that?"

"Uh-huh. So can you, once you know how."

"Cory—"

He glanced at the check, counted out money to cover it. "Really," he said. "There's nothing to it. Anybody can do it."

"For a minute there," she said, "I thought you were serious."

"About the clouds? Of course I was serious."

"You can make clouds disappear."

"And so can you."

"By staring at them."

"Uh-huh."

"Well," she said, "let's see you do it."

He looked up. Wrong kind of clouds," he announced.

"Oh, right. It figures."

"Have I ever lied to you? Those aren't individual clouds up there,

that's just one big overcast mess blocking the sun."

"That's why we need you to work your magic, sir."

"Well, I'm only a journeyman magician. What you need are cumulus clouds, the puffy ones like balls of cotton. Not cumulonimbus, not the big rain clouds, and not the wispy cirrus clouds either, but the cumulus clouds."

"I know what cumulus clouds look like," she said. "It's not like quadratic equations; it stays with you. When the sky is full of cumulus clouds, what will your excuse be? Wrong phase of the moon?"

"I suppose everyone tells you this," he said, "but you're beautiful when you're skeptical."

She was sorting laundry when the phone rang. It was Cory Buckman. "Look out the window," he ordered. "Drop everything and look out the window."

She was holding the receiver in one hand and a pair of tennis shorts in the other, and she looked out the window without dropping either. "It's still there," she reported.

"What's still there?"

"Everything's still there."

"What did you see when you looked out the window?"

"The house across the street. A maple tree. My car."

"Janice, it's a beautiful day out there!"

"Oh. So it is."

"I'll pick you up in half an hour. We're going on a picnic."

"Oh, don't I wish I could. I've got—"

"What?"

"Laundry to sort, and I have to do my lesson plans for the week."

"Try to think in terms of crusty french bread; a good, sharp cheese; a nice, fruity Zinfandel; and a flock of cumulus clouds overhead."

"Which you will cause to disappear?"

"We'll both make them disappear, and we'll work much the same magic upon the bread and the cheese and the wine."

"You said half an hour? Give me an hour."

"Split the difference. Forty-five minutes."

"Sold."

"You see that cloud? The one that's shaped like a camel?"

"More like a llama," she said.

"Watch."

She watched the cloud, thinking that he was really very sweet and very attractive, and that he didn't really need a lot of nonsense about disappearing clouds to lure her away from a Saturday afternoon of laundry and lesson plans. A grassy meadow, air fresh with spring, cows lowing off to the right, and—

A hole began to open in the cen-

ter of the cloud. She stared, then glanced at him. His fine brow was tense, his mouth a thin line, his hands curled up into fists.

She looked at the cloud again. It was breaking up, collapsing into fragments.

"I don't believe this," she said.

He didn't reply. She watched, and process of celestial disintegration continued. The hunks of cloud turned wispy and, even as she looked up at them, disappeared altogether. She turned to him, openmouthed, and he sighed deeply and beamed at her.

"See?" he said. "Nothing to it."

"You cheated," she said.

"How?"

"You picked one you knew was going to disappear."

"How would I go about doing that?"

"I don't know. I'm not a meteorologist; I'm a sixth-grade teacher. Maybe you used math."

"Logarithms," he said. "Cumulus clouds are powerless against logarithms. You pick one."

"Huh?"

"You pick a cloud and I'll disappear it. But it has to be the right sort of cloud."

"Cumulus."

"Uh-huh. And solitary-"

"Wandering lonely as a cloud, for instance."

"Something like that. And not way off on the edge of the horizon. It doesn't have to be directly overhead, but it shouldn't be in the next county."

She picked a cloud. He stared at it and it disappeared.

She gaped at him. "You really did it."

"Well, I really stared at it and it really disappeared. You don't have to believe the two phenomena were connected."

"You made it disappear."

"If you say so."

"Could you teach my nice, quiet boy? Could you teach Jeremy?"

"Nope. I don't teach sixth graders."

"But—"

"You teach him."

"But I don't know how to do it!"

"So I'll teach you," he said. "Look,
an. it's not as remarkable as you

Jan, it's not as remarkable as you think it is. Anybody can do it. It's about the easiest ESP ability to develop. Pick a cloud."

"You pick one for me."

"All right. That one right there, shaped like a loaf of white bread."

"Not like any loaf I ever saw." Why was she quibbling? "All right," she said. "I know which cloud you mean."

"Now let me tell you what you're going to do. You re going to stare at it and focus or it, and you're going to send energy from your Third Eye chakra, which is right here" — he touched his fingers to a spot midway between her eyebrows — "and that energy is going to disperse the cloud. Take a couple of deep, deep breaths, in and out, and focus on the clouds ...

that's right, and talk to it in your mind. Say, 'Disappear, disappear.' That's right, keep breathing, focus your energies—"

He kept talking to her, and she stared at the loaf-shaped cloud. *Disappear*, she told it. She thought about energy, which she didn't believe in, flowing from her Third Eye whatsit, which she didn't have.

The cloud began to get thin in the middle. *Disappear*, she thought savagely, squinting at it, and a hole appeared. Her heart leaped with exultation.

"Look!"

"You got it now," he told her. "Keep on going. Put it out of its misery."

When the cloud was gone (gone!), she sat for a moment staring at the spot in the sky where it had been, as if it might have left a hole there. "You did it," Cory said.

"Impossible."

"O.K."

"I couldn't have done that. You cheated, didn't you?"

"How?"

"You helped me. By sending your energies into the cloud or something. What's so funny?"

"You are. Five minutes ago, you wouldn't believe that I could make clouds disappear, and now you figure I must have done this one, because otherwise you'd have to believe you did it, and you know it's impossible."

"Well, it is."

"If you say so."

She poured a glass of wine, sipped at it. "Clearly impossible," she said. "I did it, didn't !?"

"Did you?"

"I don't know. Can I do another?"

"It's not up to me. They're not my clouds."

"Can I do that one? It looks like—I don't know what it looks like. It looks like a cloud."

"That's what it looks like, all right."

"Well? Can I do the cloud-shaped one?"

She did, and caused it to vanish. This time she could tell that it was her energy that was making the cloud disperse. She could actually feel that something was happening, although she didn't know what it was and couldn't understand how it worked. She did a third cloud, dispatching it in short order, and when it fell to her withering gaze, she felt a remarkable surge of triumph.

She also felt drained. "I've got a headache," she told Cory. "I suppose the sun and the wine would do it, but it doesn't feel like the usual sort of headache."

"You're using some mental muscles for the first time," he explained. "They say we use only a small percentage of the brain. When we learn to use a new part, it's a strain."

"So what I've got is brain fatigue."
"A light case those of"

"A light case thereof."

She cocked her head at him. "You think you know a person," she said

archly, "and then you find he's got hitherto undreamt-of talents. What else can you do?"

"Oh, all sorts of things. Long division, for example. And I can make omelets."

"What other occult powers have you got?"

"Thousands, I suppose, but that's the only one I've ever developed. Oh, and sometimes I know when a phone's about to ring, but not always."

"When I'm in the tub," she said.
"That's when my phone always rings.
What a heavenly spot for a picnic, incidentally. And private, too. The ants didn't even find us here."

She closed her eyes and he kissed her. I bave psychic powers, she thought. I knew you were going to do that..

She said, "I'll bet you can make inhibitions disappear, too. Can't you?"

He nodded. "First your inhibitions," he said. "Then your clothes."

The hardest part was waiting for the right sort of day. For a full week it rained. Then for two days the sky was bright and cloudless, and then it was utterly overcast. By the time the right sort of clouds were strewn across the afternoon sky, she had trouble trusting the memory of that Saturday afternoon. Had she really caused clouds to break up? Could she still do it? And could she teach her Jeremy, her nice, quiet boy?

Toward the end of the last class period, she walked to the rear of the room, moved over toward the windows. She had them writing an exercise in English composition, a paragraph on their favorite television program. They always loved to write about television, though not as much as they loved to watch it.

She watched over Jeremy's shoulder. His handwriting was very neat, very precise.

Softly she said, "I'd like you to stay for a few minutes after class, Jeremy." When he stiffened, she added, "It's nothing to worry about."

But of course he would worry, she thought, returning to the front of the room. There was no way to stop his worrying. No matter, she told herself. She was going to give him a gift today, a gift of self-esteem that he badly needed. A few minutes of anxiety was a small price for such a gift.

And, when the room had cleared and the others had left, she went again to his desk. He looked up at her approach, not quite meeting her eyes. He had the sort of undefined pale countenance her southern relatives would call po'-faced. But it was, she thought, a sweet face.

She crouched by the side of his desk. "Jeremy," she said, pointing, "do you see that cloud?"

He nodded.

"Oh, I don't know," she said, thinking aloud. "the glass might be a problem. You used to be able to open classroom windows, before everything got climate-controlled. Jeremy, come downstairs with me. I want to take you for a ride."

"A ride?"

"In my car," she said. And, when they reached her car, a thought struck her. "Your mother won't worry, will she? If you're half an hour or so late getting home?"

"No," he said. "Nobody'll worry."

When she stopped the car, on a country road just past the northern belt of suburbs, the perfect cloud was hovering almost directly overhead. She opened the door for Jeremy and found a patch of soft grass for them both to sit on. "See that cloud?" she said, pointing. "Just watch what happens to it."

Sure, she thought. Nothing was going to happen, and Jeremy was going to be convinced that his teacher was a certifiable madwoman. She breathed deeply, in and out, in and out. She stared hard at the center of the cloud and visualized her energy as a beam of white light running from her Third Eye chakra directly into the cloud's middle. *Disappear*, she thought. *Come on, you. Disappear*.

Nothing happened.

She thought, Cory, damn you, if you set me up like this to make a fool of myself— She pushed the thought aside and focused on the cloud. Disappear, disappear—

The cloud began to break up,

crumbling into fragments. Relief flowed through her like an electric current. She set her jaw and concentrated, and in less than a minute, not a trace of the cloud remained in the sky.

The other clouds around it were completely undisturbed.

She looked at Jeremy, whose expression was guarded. She asked him if he'd been watching the cloud. He said he had.

"What happened to it?" she asked.
"It broke up," he said. "It disappeared."

"I made it disappear," she said. He didn't say anything.

"Oh, Jeremy," she said, taking his hand in both of hers, "Jeremy, it's easy! You can do it. You can make clouds disappear. I can teach you."

"I—"

"I can teach you," she said.

"I think he's got a natural talent for it," she told Cory.

"Sure," he said. "Everybody does."
"Well, maybe his strength is as the

strength of ten because his heart is pure. Maybe he had the simple singlemindedness of a child. Whatever he's got, the clouds of America aren't safe with him on the loose."

"Hmmmm," he said.

"What's the matter?"

"Nothing. I was just going to say not to expect miracles. You gave him a great gift, but that doesn't mean he's going to be elected class president or captain of the football team. He'll still be a basically shy boy with a basically difficult situation at home and not too much going for him in the rest of the world. Maybe he can disappear clouds, but that doesn't mean he can move mountains."

"Killjoy."

"I just—"

"He can do something rare and magical," she said, "and it's his secret, and it's something for him to cling to while he grows up and gets out of that horrible household. You should have seen his face when that very first cloud caved in and gave up the ghost. Cory, he looked transformed."

"And he's still a nice, quiet boy?" "He's a lovely boy," she said.

he window glass was no problem. She'd thought it might be — that was why they'd gone all the way out into the country — but it turned out the glass was no problem at all. Whatever it was that got the cloud, it went right through the glass the same way your vision did.

She was in the front of the room now, thrusting pointer at the pulleddown map of the world, pointing out the oil-producing nations. He turned and looked out the window.

The clouds were the wrong kind.

A tree surgeon's pickup truck, its rear a jumble of sawn limbs, slowed almost to a stop, then moved on across the intersection. Jeremy looked down at the stop sign. A few days ago, he'd spent most of math period trying to make the stop sign disappear, and there it was, same as ever, slowing the cars down but not quite bringing them to a halt. And that night he'd sat in his room trying to disappear a sneaker, and of course nothing had happened.

Because that wasn't how it worked. You couldn't take something and make it stop existing, anymore than a magician could really make an object vanish. But clouds were masses of water vapor held together by — what? Some kind of energy, probably. And the energy that he sent out warred with the energy that held the water vapor together, and the particles went their separate ways, and that was the end of the cloud. The particles still existed, but they were no longer gathered into a cloud.

So you couldn't make a rock disappear. Maybe, just maybe, if you got yourself tuned just right, you could make a rock crumble into a little pile of dust. He hadn't been able to manage that yet, and he didn't know if it was really possible, but he could see how it might be.

In the front of the room, Ms. Winspear indicated oil-producing regions of the United States. She talked about the extraction of oil from shale, and he smiled at the mental picture of a rock crumbling to dust, with a little stream of oil flowing from it.

He looked out the window again. One of the bushes in the foundation planting across the street had dropped its leaves. The bushes on either side of it looked well, but that one bush had had its leaves turn yellow and fall overnight.

Two days ago, he'd looked long and hard at that bush. He wondered if it was dead, or it it had just sickened and lost its leaves. Maybe that was it, maybe they would grow back.

He rubbed his wrist. It had been out of the cast for months, it never bothered him, but in the past few days, it had been hurting him some. As if he were now feeling pain that he hadn't allowed himself to feel when the wrist broke.

He was starting to feel all sorts of things.

Ms. Winspear asked a question, something about oil imports, and a hand went up in the fourth row. Of course, he thought. Tracy Morrow's hand always went up. She always knew the answer, and she always raised her hand, the little snot.

For a moment the strength of his feeling surprised him. Then he took two deep breaths, in and out, in and out, and stared hard at the back of Tracy's head.

Just to see.



Stan Dryer ("An End of Spinach," July 1981) presents us with a witty tale negating any idea that, in the face of the computer revolution, the classics will be passe, rhetoric obsolete. "Every dog will have his day." Cave Canem.

## A Day In the Life of A Classics Professor

niversity Paradise Condominiums, 7:30A.M. April 5, 1998

Qui vult decipi, decipiatur. (Let him who wishes to be deceived, be deceived.)

When Professor Parker Colburn came awake to the persistent beeping of his alarm, he reached quickly over to flick it off. He got out of bed, then paused to look down on the motionless form of the girl who occupied the other half of the bed, her golden hair cascading over the pillow.

Parker walked to the bathroom and shut the door silently behind him. With any luck she might still be asleep when he left for the university.

As he shaved, a pleasant reverie came over him. She had been sweet and young and surprisingly adept. From the moment she had approached him at the cocktail party the previous evening, he had known her motives.

While little of the passion she had displayed last night had been playacting, when she awakened this morning she would probably feel she had him under her spell. Quite a mistaken assumption.

STAN DRYER

He stepped into the shower and turned up the water to a hot needlepoint. How nice it would be to find a woman he could trust. Since the sorry business with Marta, he had kept away from any relationships that threatened to become permanent. Marta, lovely Marta. In a way he still grieved her loss. They had started out so well together. A woman with a mind as keen as his own, and a most compatible bedmate. He had known that she relished power, but he had had no idea what she was really after until she had made her play for old Isa Hemshaw, the dean of humanities. It had been a move worthy of Livia, the most insidious of Roman empresses. It might well have worked had not Hemshaw, who was a student of Rome in his own right, realized what she was after. "I'd like to think it's my virile body she wants," he had told Parker, "but that is not what she is lusting for. Give her the chance and she'll be seducing President Watkins tomorrow."

Parker stepped out of the shower. Despite the agony of the thought of losing Marta, he had acted swiftly and decisively. Even though she did not have tenure, her departure had been bloody enough. It had taken him a year before he felt he once again had the loyalty of his people.

He finished drying off and stepped into his dressing room where Hartwell had laid out his clothes. Now there was loyalty. Hartwell, the perfect manservant, always anticipating Parker's needs, yet with the taste to know when he should fade quietly into the background. Parker had not imagined that human manservants still existed in an age when anyone could afford a service droid. Two years ago, Hartwell had appeared at his door just after the Midwestern team had taken the U.S. Classics Association Championship.

"The Alumni Association has employed me to act as your manservant," was all he had said concerning his origins. Although Parker had his suspicions as to the individuals responsible, he had never pursued an

investigation. Hartwell was too nice a fringe benefit to question. It was the kind of treatment that kept him on at Midwestern in the face of the most flattering offers from a number of professional teams.

Parker knotted his tie and shrugged into a Harris Tweed jacket. Then he stepped into the dining room. A place had been set at the end of the table, and next to it was the morning *New York Times*, opened to the classics page.

Straight as a statue, Hartwell stood beside the sideboard. "Good morning, sir," he said.

"Good morning, Hartwell."

"Will the young lady be joining you for breakfast?" Hartwell's tone was as matter-of-fact as if he were asking if Parker wished more coffee.

"I think not," said Parker.

"Your eggs will be ready in a minute."

Parker seated himself, took a sip of coffee and glanced at the head-lines. The Detroit Throats had finished off the Philadelphia Golden Tongues in the Eastern Divisional Finals. So it would be Detroit and Los Angeles in the Super Forum. Quite a feather in his cap. The lead orators on both teams had trained under him at Midwestern.

He was halfway through his breakfast and the rest of the classics page, when the door to his dressing room opened and the girl came in. Parker suppressed a frown when he saw she was wearing his dressing gown. It would, he knew, absorb enough of her musky perfume so it would have to be cleaned.

"Parker darling, I thought you were going to get me up," she said, her round little mouth in a half-pout.

"You looked so comfortable, I just couldn't bring myself to awaken you," said Parker.

"Would Professor Parker's guest wish some breakfast?" Hartwell had eased into the room.

The young lady's eyes popped wide. "Hey, wow, are you for real?"

"Very real," said Parker.

"The subject of breakfast?" said Hartwell.

"Yeah, sure," said the girl. "Juice, coffee, and a couple of eggs over easy."

Parker knew Hartwell must have inwardly winced at the commonness of this expression, but his face betrayed nothing. "Very good, madam," he said and left the room.

The girl sat down and moved her chair close to Parker. She leaned over and touched his arm with her hand. The dressing gown came open to present an excellent view of her firm and lovely breasts. "That was a lot of fun last night," she said.

"Most enjoyable," said Parker. If there was anything he detested, it was an instant replay over breakfast of the sexual athletics of the previous evening.

"I sure hope it isn't going to be

the last time," she said.

"I am sure it will not be," said Parker, adding to himself, "but not with me." How many times had he run through this script before? People still seemed to have the idea that a professor of classics was a particularly easy mark. Anyone with the slightest grasp of the history of Rome should have known that the classics gave the most thorough education in the venality of man.

"You are a sweetie," said the girl.

"And I'm going to be a naughty and ask for one tiny favor from you."

"Certainly," said Parker, "whatever I can."

"I had a bad break on the team tryouts." The words came pouring out in a rush as if she feared he would stop her. "I mean, what kind of luck to get laryngitis the day of the trials. Could you be a doll and have a little tryout just for me?"

Parker tried not to let his boredom show. Couldn't she even come up with an original pitch? Laryngitis, my throat. She'd probably screwed up the first line of Caesar's address to his troops. "That one I can't help you with," he said. "Rules are rules. We run the team tryouts twice a year. You can come back in September and give it another try."

She pulled back from him, her face bare with anger. "You bastard," she said.

Now the tears, Parker thought.

But Hartwell, with his perfect tim-

ing, reappeared with the girl's breakfast. He calmly placed the dishes before her, then turned to Parker. "You wished your car for 8:15," he said. "It is now that hour."

Good old Hartwell! Parker had ordered the car for 8:30, but his manservant had read the situation and spared him fifteen minutes of tears and supplication.

Parker rose. "Infinita est velocitas temporis," he said. "Hartwell will see to getting you a cab when you're ready to leave."

University Boulevard, 8:30 A.M.

Ars longa, vita brevis. (Life is short and art is long.)

Big Harley Wilson drove Parker's limousine with a terrifying abandon, cutting in and out through the traffic of autocars at a speed that would have meant disaster for anyone with a shade less skill. Wilson had been a running back with the now defunct Green Bay Packers, and he was used to hurling himself through holes that opened up for only a fraction of a second.

As Wilson drove, he cursed. "No mech scab gonna cut me off." "Eat monoxide, droid bastards." "Furbin microbrains."

And, Parker thought, he had every reason to curse the mechanisms that piloted the other vehicles. They, or their brother androids, had destroyed Wilson's most promising career. More than that, he knew the passionate love

this man still had for football. In his time off he worked out with a group of students. What anyone saw in it Parker could not understand. The university did not even give phys. ed. credits for football. And yet there they were, memorizing the old playbooks and working through the drills in the one muddy corner of the playing fields that had not been put back into corn. A few nuts desperately believing that the glories of the past would someday return.

Yet that was the way most of his friends and relations had viewed him fifteen years ago. Parker Colburn, the wastrel son of one of the better Boston families, escaping reality in his dusty tomes. His father had made his own feelings quite clear. In the middle of Parker's junior year, he had summoned him over from Harvard. up to his law offices in the high-rise on State Street. There, with Parker looking out at the spectacular view of Boston harbor and the airport beyond. Samuel Parker, Esq., had read aloud a letter he had just received from his son's senior tutor. Professor Detros.

"The problem with your son is not that he lacks industry. He is a devoted scholar in the area of his interest, the study of Roman oratory. Unfortunately, his almost monomaniac interest in this subject has had a most deleterious effect upon the rest of his studies."

His father had paused and looked up over his reading glasses. "Jim Detros would not have written to me if this were not serious," he had said.

Parker had known that to be true. It was not usual for a senior tutor to give that kind of a report to a parent. Then Detros had been cox on the Harvard crew his father had captained the year they won the Sedgwick Cup.

"I sent you to Harvard to broaden your education," his father had said. "That does not seem to be happening."

Parker squirmed in his chair and promised to try to bring up his grades. His father had put down the letter and, in a brief summation for the jury of all Harvard alumni, had pointed out that a liberal education included far more than the classics.

The message had been clear. You got good grades, made the crew, joined the right club, and you were on the road to a partnership in the firm and an office with its own view of the harbor.

Fortunately Parker had, with all the stubbornness of youth, persisted in his folly. He had gone out for no teams, joined no clubs, and graduated with only a magna in classics and a passion for oratory. His only kudos had been the Latin oration at commencement. In those days there had been no competition. He had done a magnificent job, although only he and perhaps a dozen scholars in the audience had even understood a word of it. How different it was today! Thanks to hypnotutoring, 300 million Amer-

icans and half the rest of the world understood Latin like a native tongue. The competition to give the Latin oratory at Harvard was now incredibly fierce. That part of commencement was always televised nationwide, and the orator was instantly snapped up by a major-league team.

Yet Harvard did not give that great a classics education nowadays. They had dropped to the Class 2 League four years ago and had a rotten record there. They were even muttering about deemphasizing the classics as not being a true part of a liberal education. The truth was that those ivytower jokers did not know how to go big time. His best bit of good fortune had been when his application for instructor at Harvard had been turned down and he had taken the job at Midwestern.

Midwestern was a place that knew how to swing with the times. They had been one of the first universities to get out of football and into oratory. There had never been a problem about money, not even when the oratory team was still showing a loss. Once he had started fielding winning teams, they had been most lavish in their appreciation.

Tires squealing, the limousine turned into the main quadrangle and braked to a stop in front of the Classics Building, a sparkling thirty-story tower of glass and stainless steel. Across the way, the old football stadium had been torn down and on the

site was rising the new Forum, a building designed from the ground up for the business of presenting Midwestern team debates to a live audience of thirty thousand, with 20 million more video viewers.

Parker knew he was on the way to the top. What pleased him most was that his father had shown no bitterness but was genuinely proud of him. The old man would probably be calling him up today about getting tickets for the Super Forum.

There was only one possible flaw in the whole structure of his success. Fortunately, he might have detected it in time.

"Have the car here at five," he said to Wilson as his chauffeur opened the door for him. "And bring Steve and Rollo. I have some special work for the three of you."

Wilson grinned at him. "We gonna blow away some droids?" he said.

"Not exactly," said Parker.

He entered the building and crossed the lobby to the elevator, raising his right hand to identify himself to the security droid at the desk.

Aside from a couple of adminidroids who stood politely silent with their paper feed trays, there were only two others in the elevators as they started up, MacLavish, one of the assistant coaches, and a young student in a pseudo-sixties outfit. Parker ignored the kid in his khaki shirt, bleached Levi's, and junk jewelry and made polite conversation with MacLavish, telling him how pleased the staff should be with the number of Midwestern orators on the Super Forum teams.

The student left on the fifteenth floor, and, as he squeezed past, Parker felt the expected object slipped into the pocket of his jacket. MacLavish left at the twenty-fifth floor, and Parker continued on to his penthouse offices at the top of the building. Leaving the elevator, he headed quickly for his office. Maria, his lovely flesh-and-blood secretary, smiled at him as he came in. Another bonus from the Alumni Association, she had replaced a secredroid with considerably better word-processing skills. However, Maria's effect on general office morale more than made up for a few spelling errors.

"You've got four messages on your screen," she said.

"Catch them in a minute," said Parker. He entered his office, shut the door behind him, and fished the message from his pocket. It was a rolled-up scrap of paper with but one sentence written on it: "Project Underdog is for real, and Cartwell is your man."

Midwestern University Classics Building, 10:00 A.M.

Duas tantum res anxius optat, panem et curcenses. (Two things only the people desire, bread and circuses.)

"We are most fortunate today to

have the opportunity to be in the office of the man who has probably done more for the sport of oratory than any other living American." Stan Waterman stared into the television camera with the look of pure sincerity that made him America's favorite sportscaster. "I am referring of course to Professor Parker Colburn of Midwestern University here in Urbane City. Good morning, Professor Colburn."

Parker gave the camera his most pleasant smile. "Good morning, Stan," he said. "And please just call me Parker."

"I guess this is something of a redletter day for you, Parker," said Waterman. "Bill Morton and Nancy Hendrick, the lead orators for Detroit and Los Angeles, the two teams that will be going head to head in the Super Forum next week, are both All-American Classics Scholars from Midwestern. How does it feel to have coached the top orators on both these teams?"

"It's very gratifying," said Parker.
"Everyone in our whole coaching organization is very proud of Bill and Nancy, who as you know, are two very talented young persons."

"Now," said Waterman, "I'm not trying to catch you with a mouth full of pebbles, but where are you putting your money on the Super Forum?"

Parker knew this was coming. "That's a tough one, Stan," he said. "With Morton orating at .782 in Cic-

ero and Watson with an unanswered point average of .657, I'd have to give Detroit the edge in offense. But then you look at Hendrick's earned rebuttal average of .375, and I can see some debate shaping up."

"Well, said Waterman, "I can see that the Fox of Midwestern isn't giving much away. Let's speak to this one from a slightly different angle. Cicero came on strong for the initial declamation and downplayed the rebuttal. Do you agree with this? Is the team with the stronger offense going to have the edge in the Super Forum?"

Parker thought quickly. Waterman was definitely misquoting Cicero, but it would be a big mistake to catch him up on it. Waterman was the living proof of the adaptability of a good sportscaster. He had been one of the top football play-by-play announcers, but the end of physical major-league sports had not fazed him in the least. From somewhere he had gleaned enough surface understanding of the classics to fool the public. If oratory hit the skids tomorrow, Waterman would land on his feet. He'd pick up a smattering of whatever fad next caught the public fancy and be on his way. It would be a mistake to alienate anyone so resilient.

"At Midwestern," said Parker, "we've always paid a lot of attention to what Cicero has to say about oratory. But we have to remember that our primary purpose here is not to train orators but to mold men and

women. When our graduates step up to the podium of life, they're going to have to be able to handle both the offense and the defense. Thus, we favor a balanced attack, both declamation and rebuttal."

"Could not have said it better myself," said Waterman. "I think the audience out there now has a little better idea why this young coach has three consecutive undefeated seasons behind him. But I see that our time is about up. Thank you so much for taking a moment to talk to us, Professor Colburn. I know you'll be watching the Super Forum with every bit as much interest as our viewers out there in videospace."

Durkett Memorial Gymnasium, 11:15 A.M.

Sic transit gloria mundi. (Thus passes the glory of the world.)

Parker opened the heavy metal door and entered the dusky vault of the empty locker room. As he walked through the room, there was no sound but his footsteps echoing from the rusting lockers, quite a difference from the days when these walls had reverberated with the victory cries of a thousand Midwestern teams.

He paused at a door with an opaque glass panel that read "Director of Calisthenics." He tapped lightly on the panel.

"Come in." The voice that answered betrayed a sad weariness.

Parker pushed open the door. The

room was as he remembered it. The walls were covered with carefully framed pictures of Midwestern teams. all of them grinning out at him, a paradigm of young manhood now betraved into oblivion. Behind an old metal desk, leaning back in his swivel chair, was Jason Hobart, once the football coach with the best record in the conference, now reduced to a sinecure poor in both spirit and remuneration. Parker had not seen Iason in over two years. He looked much the same. His hair was perhaps a little whiter, the frown on his face a bit more defiant. "Well, well," he said, "Professor Colburn. And to what do we owe this honor?"

Parker ignored the man's belligerence. He understood too much about the slippery footings of power not to forgive the anger of a man whom the fates had brought low.

"Hello, Jason," he said. "I wanted to talk to you about Batridge." There was no use in idle chatter; they both knew why he was here. By rules some thought archaic, every student was required to participate each semester in an activity of benefit to his body. No standard of performance was enforced, only a minimum attendance. For those with no interest in aerobic dance or Frisbee tossing, droids were provided to lead calisthenics twice a week. Len Batridge, the anchorman on the freshman oration team, had taken it into his head to defy these rules. He had missed enough sessions so that Hobart and his robot assistants were about to flunk him out.

The coach leaned back in his chair and smiled. It was not a smile of pleasure. "Young Batridge," he said, "seems to have forgotten one of the tenets of this university. Mens sana, in corpore sano."

"There is nothing wrong with Batridge's body," said Parker. "He jogs eight miles a day."

The coach raised his hand. "Enough," he said. "Spare me the oration. I am not interested in all the good words you will put in for me with the administration. All I have left, after all, is my integrity. The rules are simple and they apply to Batridge. No gym credits, no oratory team."

For a second Parker felt a touch of pity for the coach. Then his resolve stiffened. This man was not, after all, one who should be boasting about his integrity. "I was hoping that I would not have to remind you," he said.

"Remind me?" Jason's eyes took on a hunted wariness.

"Jim Wall," said Parker. "All-American. Played four years for the Oilers, if I remember correctly. Likable young man, but he had real trouble with his Latin verbs. A big mistake, his taking Latin. Those were your words, if I remember correctly. 'A big mistake. Just edge his grade up from a D to a low C.'"

The coach covered his face with his hands. "You bastard," he said, his

voice almost a sob.

"I was just an instructor at the time. No tenure. And here was the man who had taken Midwestern to the championship asking just one small favor of me. What could I do but go along with it?"

Jason hunched forward over his desk, his face still masked behind his hands. "Get out of here," he said in a hoarse whisper.

"In a moment," said Parker. "I just wanted to remind you of a promise you made at the time. If I ever wanted a favor, I had only to ask."

The coach's hands became fists crashing down onto the desk. "Sure, what the hell. You own everything else. Why the hell not my honor. I'll fix it for you. Now just get out of my sight before I kill you."

Parker moved to the door. "I knew I could count on you," he said. He went out and eased the door shut behind him; his last view was of the coach hunched sobbing behind his desk.

The Midwestern University Faculty Club, 12:30 P.M.

Carpe diem, quam minimum credula postero. (Seize now the day, nor trust some later day.)

It was a small gathering in the Presidential Suite: President Watkins, a few selected department heads, and a couple of dozen wealthy old grads. The purpose of the meeting was the Biannual Update on Unversity Opera-

tions, a euphemism, Parker knew, for putting the arm to the alumni.

This year's special target was Arnie Hooper, the president of Universe Robotics. His seating at the head table between Parker and President Watkins was not a matter of chance. Parker knew his assignment: he was to drop a few pearls of wisdom about the Super Forum and Midwestern's chances in the Diogenes Bowl, and to listen with real or pretended enthusiasm to whatever Hooper might have to say.

Parker provided his pearls while Hooper wolfed down his roast beef. He was a hulk of a man with a ruddy face who never failed to let you know how many miles he had run the previous week. He polished off a piece of apple pie a la mode, took a swallow of coffee, and turned to smile at Parker. "Your team sounds like it's in top shape," he said.

"We certainly think so," said Parker. "We're seeing better talent every year."

"Great," said Hopper. "You covering all the other bases?"

"The other bases?"

"Don't ever drop your guard," said Hooper. "Don't ever think you've got it made in the shade. I almost got caught that way myself."

"How's that?" said Parker. He knew exactly what was coming, but he also knew roughly how many kilobucks Hooper would be good for in the next alumni appeal.

"I almost missed it," said Hooper.
"Four hundred thousand a year Detroit was paying me in those days."

"And worth every penny of it, I understand," said Parker.

"I sure thought so," said Hooper.
"I knew I was one of the best damn shortstops in the business. I was so busy thinking how great I was, I almost missed the handwriting on the wall."

"When was that?" said Parker.

"I remember the day," said Hooper. "March 1988, it was. We were in spring training. Barton, the manager, used to let the android pushers come around as a kind of comic relief. He'd put Whitey Chisholm on the mound. Whitey would wing in a dozen or so of his 95-mph fast balls, and we'd all have a good laugh watching the droids strike out. Then this kid shows up with his droid. It wasn't much to look at. They didn't flesh them out in those days. It walks behind the kid with a kind of slow shuffle"

Hooper paused and glanced around the table. All other conversation had stopped. Even though Parker had heard the story a couple of times before, he did not need to feign his fascination. It marked, after all, a vital turning point in his own career.

"This time it was different," said Hooper. "The droid stands there at the plate with a bat in its plexi-hands, not moving at all.

" 'Where you want him to hit it?'

the kid says. He wasn't more than twenty-two, but he was dead serious.

"Barton smiles. 'Just have him hit it out of the park,' he says.

"'O.K.,' says the kid. He goes over and opens a panel in the droid's chest. The thing wasn't even rigged for voice commands. The kid finishes his adjustments, backs away, and nods to Whitey on the mound. Whitey puts the first one in easy. The droid swings the bat with a kind of a jerk, and the ball lofts up, clear over the fence in left field.

"No one says anything except Whitey. He pounds his glove with his fist. 'Gimme another ball', he yells.

"The next ball comes in hard, a vicious curve that cracks in over the plate but a little low. The android lets it go. 'What's the matter,' Whitey shouts, 'its battery gone dead?'

"'That was a ball,' the kid says. It was a lesson the pitchers would all learn in a hurry. Droids never made mistakes over balls and strikes.

"Whitey throws again, this time his famous fast ball. The droid jerks his bat again and plasters a drive into right field that Henderson catches with his back against the fence.

"'Sorry,' says the kid, 'his adjustments drift a little.' He tweaks up the droid again, and we all stand around in silence while that machine puts six of the next ten pitches out of the park."

Hooper paused to glance around at his audience again. "Now the reason

I tell that little story is to make one point very clear," he said. "In this day and age, never believe that you can't be replaced by a machine. For myself, I didn't think much about that robot until the middle of the next night when I woke up in a cold sweat. That piece of hardware was after my job! If you could make one that could hit. you could make one that could run. or field, or catch passes, or drop in swishers from forty feet out. It didn't take me long to figure out what I had to do. I put together every penny of cash I could lay my hands on and bought into the kid's operation. The kid is Ferrill, my director of research. And you all know the rest of the story."

There was a moment of quiet, and then President Watkins spoke. "I have to say that I agree with Arnie 100 percent. In this day and age, you can't rest on the laurels of past accomplishments. And that's part of the reason why we're going to be devoting this afternoon to a look at our research facilities here at Midwestern. The best damn facilities of any university in the U.S.A. — or the world, for a matter of fact. But we can't stop where we are. We've got to come up with the new ideas ahead of everyone else."

Hooper Laboratory of Robotics Engineering, 2:35 P.M.

Frontis nulla fides. (Men's faces are not to be trusted.)

Parker trailed along with the alum-

ni, chatting with them about the oratory team. His presence here was not required, but he had very much wanted to have an excuse to check out this facility. As they moved along, he kept his eyes and ears open. What they were shown was interesting enough. There were giant droids that were being designed to put together high-rise buildings in much the same way a kid would use an erector set. There was a genetic engineering robot that would design and glue together bacteria of your choice in a couple of hours.

But what was of far more interest was what the glib young men in white lab coats did not demonstrate or speak about. Nothing was said, for example, about research in human accents and speech patterns, an aura that had supposedly been one of the most promising two years before, just prior to the Field of Endeavor legislation. For mankind had become frightened enough of its machines that it was attempting to define at least a few areas where they would be forbidden entrance. And one such area was the arts. It was now illegal in the United States for anyone to program a computer in a manner that would replace a human in an artistic enterprise.

Thus, all robotic research on creative writing, on the visual arts, and specifically on Latin oration was supposed to have come to an end some two years before. But had it? Why had

Dr. Fenmore, previously one of Midwestern's most prolific publishers, stopped writing journal articles? Fenmore had been one of the most assiduous aspirants for funding, the most eager to show visiting alumni his new toys. Where was he today? And why were they carefully routed around one whole section of the laboratory where locked doors in the main corridors barred their way? What was the purpose of the filing cabinets with bars and padlocks he saw in some offices? And why did the little cliques of graduate students suddenly become silent as they approached?

Parker looked and listened and said nothing. He knew much about the illegal work that was going on, but he had no idea what level in the university supported this activity. It was entirely possible that President Watkins was in on the whole business. Parker also knew that exposing the activity could be a very big mistake. There were too many other unscrupulous individuals who would pick up the work if there were a buck to be made on it. On the other hand, he knew just how quickly Watkins would drop the project if there were to be no cash payoff.

Thus, it would be better to attack this problem from a somewhat different angle, to fight fire with fire. And the time for action was now.

The Bit Bucket Lounge, 5:25 P.M.

Honesta turpitudo est pro causa bona. (Crime is honest in a good cause.)

It was not the sort of place that Parker normally frequented. The droid behind the bar was an obsolete model that could only rasp the simplest of pleasantries in response to an order. The feedback was gone in half its servos, and it jerked the beer mugs onto the bar, slopping out half the foam. The disks on the holobox were ancient, and the projection of the naked dancer writhing on the end of the bar was half-obscured in laser fog. It was the type of joint inhabited by the scum of society, codeleggers, pornadroid pimps, and data hijackers.

Starkley was waiting for him in a booth in the back, the same young man who had dropped him the message in the elevator. Parker swallowed his disgust and gave him a pleasant smile as he sat down. If he had been able to find anyone else to penetrate Project Underdog, he would never have touched Starkley. Just one more punk who thought he could make it big on the side by point shaving on the oratory circuit. But the kid knew his oratory, and Fenmore had been happy to pick him up for his illegal project, probably figuring that Starkley's criminal record gave him some kind of hold over him. Too bad that Parker had grabbed hold first.

"You bring the money?" demanded Starkley.

"Not so fast," said Parker. "I need to know a few details. Just who is this

Cartwell, and why should I be interested in him?"

"He's just a super hack who's writing the emotion subroutines for the oratory droid. Up till now, no one's been able to make any progress on them. The droid spoke O.K., but it had no audience pull. Now all of a sudden Cartwell is beginning to raise the audience interest factor. No one knows quite how he's doing it, but his subroutines seem to be working."

"O.K.," said Parker. "Sounds like our man. I want you to finger him for me."

Starkley shrank back in the booth as if he had been physically struck. "No," he whined. "I'm not fingering any rubout job."

"Not a rubout," said Parker firmly.
"I just want to have a little talk with him."

"I won't do it," Starkley said. But his voice told Parker he would.

"An extra five hundred," Parker said. He placed a wad of bills on the table between them.

Starkley reached for the money, but Parker swept it out of his reach. "Not so fast," he said. "You get the cash when the job is done."

"O.K.," said Starkley, "but no rough stuff. You promise me that."

"No rough stuff," said Parker. "Word of honor."

Parking Lot, Hooper Laboratory of Robotics Engineering, 7:45 P.M.

Oderint, dum metaunt. (Let them

hate, provided that they fear.)

There were five of them in the limousine, Wilson and Starkley in the front and Parker, Steve, and Rollo in the back. Parker felt dwarfed by the bulk of the latter two gentlemen, who were former linebacker friends of Wilson's. They all waited in silence as an occasional late worker came out of the building and crossed to an autocar.

Then Starkley spoke. "That's him."

"You sure?" demanded Parker.

"Of course I'm sure. I'd know that screwy walk anywhere."

"O.K., take him," said Parker.

The boys were out of the car in an instant, moving low and fast on an intercepting course.

"You better get moving," Parker said to Starkley. "It won't be good for your health if he knows you're in on this."

"The money?" said Starkley.

"Get moving," said Parker. "You'll get paid when we know we have the right man."

Starkley disappeared into the darkness.

A half minute later, Cartwell was sitting blindfolded beside Parker in the back seat, with Rollo holding his arm persuasively behind his back. With Wilson at the wheel, the limousine swung out of the parking lot and headed into the countryside.

"What do you want?" Cartwell whimpered. In the light of a street-light they passed, Parker could see he

was a mere boy of no more than twenty.

"Your name is Terry Cartwell?" Parker spoke in a tone that demanded no hesitation.

"Yes."

"And you have been programming for Project Underdog?"

The boy let out a gasp.

"Well, have you?

"Yes." Terror made his voice barely audible.

Now Parker spoke kindly, almost fatherly. "Gotten in a little over your head, haven't you?" he said.

"The money," said Cartwell. "You don't know what they pay."

"I know exactly what they pay," said Parker. "I also know all about the last couple of jobs you did and what they paid. Disassembling a Big Blue operating system, for example. That's good for five years in the cooler right there."

"Who are you guys?" said Cartwell.
"You're not the cops. Who are you?"
"Never mind who we are," said

Parker. "Let's just say that we're very interested in Project Underdog going down the tubes. You get the message?"

"O.K., O.K., I get it," Cartwell whimpered. "I'll quit. I can be gone tonight. Just no rough stuff."

Again Parker assumed his father tone. "No one is going to hurt you if you cooperate. But leaving the project is the last thing we want you to do."

"What do you mean?"

"You are coding the emotional subroutines, are you not?" said Parker. "Yes."

"And doing a very good job, I understand."

"I sure am," said Cartwell. "The audience response factor was up twelve points for my last revision."

"Where it will stop," said Parker.
"You will run into some fundamental
obstacles in your programming. You
will discover that the approach you
have taken has dead-ended. And all of
the variations you try will dead-end
also."

"But I can't do that," said Cartwell.
"That would violate my programmer's credo."

"Now get this straight," said Parker. "Just forget your hypocritical little credo. You are a punk kid with a well-documented criminal history. If Project Underdog succeeds, you will be prosecuted and convicted for your last two little forays outside the law ... after you get out of the hospital. Do I make myself clear?"

"Yes." The voice was faint, but Parker knew he had made his point.

"O.K.," Parker said to Wilson. "Let's drop him off."

The car slowed. "On your walk back to town," Parker said to the boy, "you'll have a lot of time to think. Just remember that we know exactly what is going on in your so-called secret project. One mistake will be your last."

The limousine came to a stop, and

Rollo shoved Cartwell out the door with a push that tumbled him into the ditch.

As the car gunned away, Parker calculated his chances. Let Cartwell hate him, the nameless power that now controlled his life. As long as the fear was stronger, Parker knew he would win out.

The Oratory Building Penthouse Suite, 8:35 P.M.

Spectatum veniunt, veniunt spectentur ut ipasae. (They come to see, they come that they themselves may be seen.)

When Parker arrived, the reception was in full swing. Dean Hemshaw greeted him warmly as he entered. His greeting should be warm. Parker's operation funded about three-quarters of the humanities budget.

He stepped into the room and glanced about. Everyone who was anyone on campus was there, the men mostly in pseudo-leather formal wear, the women in the simple tunics that had — for the moment, at least — become *de rigueur* for a semiformal party. How little humanity had changed in two thousand years, Parker thought.

Then the first of his colleagues noticed his presence, and he was caught in a whirl of congratulations. He moved about the room, little groups forming around him, anxious to hear the plans for next year's team.

For an hour he played the pleasant

host, and then, exhausted from the effort, excused himself and escaped to the open terrace at one end of the suite. It was cold with a biting wind, but he stood for a moment looking down upon the lights of the campus. How soon, he wondered, would all of this belong to him? Hemshaw was retiring soon, and Parker knew that the only question as to his moving up to dean was who would replace him in oratory. And the step from dean to president? If Watkins was in on Project Underdog, and that project failed, he would be in a most precarious position. The right information leaked to the right people might just cause a hurried resignation.

Then Parker was aware of a young woman beside him. He turned and looked at her. In the dim light he could see the pretty oval of her face looking up at him. The wind tightened her tunic against her body, revealing a figure that quickened his pulse.

"Well, hello," he said.

"Hello," she said. "I'm Fern Whittington, the new diction coach. I'm working for Walt Stanhope."

"Oh, yes," said Parker. It was a pity his department was so large that he did not have the chance to interview all the new hires in person. In this case, a real pity. He made a mental note to congratulate Stanhope on his recruiting.

"I'm really excited about working for Midwestern," she said. And then her smile opened into something

close to an invitation. "And of course working with you. I mean, up at Harvard all they talked about in the Classics Department was what you've done for oratory."

"Well," said Parker, "not much of it is my doing. It's mostly the coaching staff. But it's awfully cold out here. Why don't we go someplace quiet where we can talk a bit about what we're planning for next year?"

"I'd like that very much," she said. "Where do you have in mind?"

"How about my place?" he said, and discovered that his heart was pounding with sophomoric anticipation.

"That sounds awfully nice to me," she said.

University Paradise Condominiums, 11:45 P.M. Varium et mutablile semper femi-

na. (A fickle and changeful thing is woman.)

Parker lay on his back in bed, with Fern asleep beside him. She was, he thought, a truly remarkable woman. They had talked for an hour over coffee, and he had discovered in her an intellect that could challenge his own. She knew what she wanted, the opportunity to make her mark in oratory. She obviously had her opinions and would fight to the death for what she believed. Yet she told him of her plans with an openness that precluded deception.

Then he had reached out for her.

and she had come to him willingly. They had made love with an innocence and freedom that had dissolved into bitter dust all of Parker's memories of the one-night stands of the past.

Could this be the woman he had been waiting for? Would she be the end of his loneliness? And would she be the one to share his rise to the top? Already he could not conceive of any adventure into the future without her beside him.

Parker reached out and touched her back. She turned in her sleep, her hand grasping his and then relaxing. Parker stretched his body in the bed. "Not a bad day," he said to himself as he sank into slumber. "Not a bad day at all."



"The Man Who Came Close" humorously warns that you can lose considerably more than your shirt playing the market. Harvey Jacobs last appeared in F&SF with "Busby" (December 1983).

## The Man Who Came Close

BY HARVEY JACOBS

eymour Berman decided to speculate when he was convinced that survival, not greed, was the issue. Berman considered greed a sin but survival a virtue. His attitude was not religious but strategic. He looked for guidelines that were advantageous to the entire human race.

What finally clarified things for Berman was a confluence of forces: his thirty-ninth birthday and an audit by Internal Revenue. Himself a certified public accountant, he expected professional courtesy from the accountant who audited him. But he didn't get it.

Time and government conspired to rob him in the same week. The tax investigator disallowed Berman's deductions for three years of Yoga instruction; for psychic guidance by a brilliant seer who came east once a year from Big Sur to read the tarot, palms, and star charts; and for subrental of an isolation tank where Berman went to float in the dark, reduce stress, and connect with essential energy. Berman had listed these as medical deductions, nonreimbursed by health insurance. He felt his position was valid. His doctor told him he bad to do sometbing.

When Berman left his audit, he was changed. All he had wanted was to break even, to bold his own. Instead, he was slipping backward. His modest dream of owning a country house near a lake where deer came to feed and rabbits ate his carrots was fast fading. It came to Berman that he carried a large meter on his back that ticked off minutes and dollars. Berman cold not afford to ride his own taxi.

Until then, Berman had avoided speculation. He regarded speculation

as gambling and gambling as immoral, not illegal. The idea of getting something for nothing struck him as enervating and corrupting. He prided himself on simple tastes and moderate habits. His work as an accountant was enough for him, he enjoyed manipulating other people's numbers. When clients made huge profits, it did not bother Berman, because other clients suffered huge losses. For every one who made it to Westchester, another got cancer. The yin and yang of high finance amused him, but Berman kept his distance. The best things in life were free.

Now, with fresh insight, Berman frothed to enter the market. Even after paying the back taxes, there was a nice nest egg. Berman had been prudent and a saver. The question became, Where to invest and in what? There were conservative investments and aggressive investments. Municipal bonds, stocks, metals, grains, pork bellies, real estate, volatile schemes. There were deals to be made with prospective heirs willing to pay huge interest for loans against the imminent death of a father, mother, or uncle. There was oil drilling, coal mining, the money market. Berman studied them all, including mutual funds, load and no-load; stamps; coins; Ginnie Mae mortgages; franchises; silent partnerships; video-game routes; the whole spectrum. He read the Wall Street Journal; Barron's weekly; Forbes, the "Capitalist Tool"; Money;

U.S. News & World Report; and he watched Louis Rukeyser on PBS every Friday.

Berman quickly decided against conservatism. Investments that seemed the most secure proved the most treacherous. In the Great Depression, the Berman family had lost their savings with the failure of a bank as secure as Mount Rushmore. Besides, if Berman was to get really rich, there was no point in taking too much time. The great meter ticked endlessly. The future became yesterday much too quickly. And Berman was, by nature, not bullish on tomorrow. He was even suspicious of the past. His focus turned to speculations of the highest risk with the promise of enormous reward.

Since life had become a no-win proposition, a poor long-term investment at best, taking maximum chances was not really chancy at all. It was necessary.

What bothered Berman in advance of any monetary success was that success would steal time from him and the tax collector would reach deeply into his pocket. He would grow older as he felt the fingers of the IRS grab close to his scrotum. Berman wanted his money fast. He wanted enough to keep. His fantasies became more and more expensive. Short of crime, there seemed no way. And crime held no promise, because Berman was not a criminal — and if he were caught, it would mean trading one prison for another.

Berman confided his despair to Jane Forbish, his mistress of many years. Jane was a commercial artist who had no wish to marry. Berman had known her since public school. They bad grown up together. One night, dinner and a Fellini movie ended up in Jane's brass bed. Since that evening, every Thursday, Berman took Jane to dinner and a film. Afterward, they made love or something that approximated love. It was a comfortable, enduring relationship they both enjoyed. Neither kept secrets.

"I could go to Atlantic City or Las Vegas or Monte Carlo and roll dice," Berman said. "But I would lose. I know it. I want a situation where choice replaces pure chance."

It was Thursday and Jane was undressing in her bedroom. Berman already waited in his jockey shorts. "Seymour, I want to tell you about something interesting," Jane said. "I'm doing a promotional folder for these peculiar people. They're very bushbush. But they might just be onto something."

"Husb-bush? I'm not interested in a scam. I'm willing to hit big or be wiped out but not robbed. Not that being robbed is so bad, and the loss is deductible. What bothers me is the thought of my robber gloating and counting in some beautiful place...."

"I don't think it's any scam or sting," Jane said. "I think they are sincere people, just secretive. They move very quietly, if you get my meaning. I was pledged to silence about their pamphlet. Which was unnecessary, since I don't understand much of the copy. Even so, I don't hold back from you."

Berman took off his jockey shorts and folded them. "Thanks for that, Jane. So tell me about your friends."

"They're not my friends, Seymour. But they are into megabucks." Jane unclasped her bra. Berman watched her breasts fall free. Her breasts always surprised him when they made their appearance. They were hidden assets when she dressed in tailored suits. "The pamphlet is addressed to doctors, lawyers, senior executives. It suggests and invites personal contact and investigation with an eye toward mutual gain. It says that there is a new investment market with powerful potential, but the pamphlet never gets more specific. Maybe you should contact the company."

"What the hell," Berman said. He had forgotten to take off his watch. Jane hated it when he kept his watch on. "Should I say you sent me?" Berman put his watch on an end table near the telephone.

"Why not? They must realize I would tell my lover. They have to expect that. They seem sophisticated." Jane switched on a Vivaldi tape and lay back on her pillow. "Lights off or on?"

"Lights on. Let there be light," Berman said. The last time they had lain together in the dark, Berman had had the fantasy that he was penetrating Lady Luck. He kept thinking of compound interest.

Berman performed unusually well that Thursday. His new set of goals gave him a dividend of energy. He felt very tender toward Jane, even possessive. Before he slept, Berman considered that the spirit of acquisitiveness might affect their relationship in a dramatic way. Maybe he would get rich for both of them, maybe for sons and daughters and grandchildren. The thought astonished him. It was quickly erased by sleep, and the next morning he remembered it as fused to a dream.

On the following Monday at ten, Berman sat in a posh Park Avenue office watching an elderly receptionist with blue hair. He had telephoned Anatomical Ventures, Ltd., using the number Jane had given him. A Mr. Barn took his call, asked careful questions in a low, businesslike voice, then made the appointment. An electronic note sounded, and the receptionist smiled at Berman. "Please go right in," she said. "Mr. Barn's office is third on the right. He's ready to see you."

Mr. Barn's office was warmly furnished in leather and wood. There was a soft beige carpet and several flower paintings in ornate gold frames. It seemed the office of a mature man, but Mr. Barn looked like a boy. He was younger than Berman by many years and probably had already

made a fortune. Berman felt a spasm of envy. Mr. Barn grinned. "Do sit down, Mr. Berman. Would you care for some coffee or a cold drink?"

"Nothing, thanks," Berman said.
"What I would most care for is information."

"A no-nonsense person," said Mr. Barn. "I respect that."

They began by speaking of Berman's investment objectives. Berman was encouraged to be frank, and he responded. "I have \$65,000 in a cashier's check," he said. "I have been looking for the right venture. I do not want to waste my life studying the Time's business section or watching tickers. I want what can be best described as a clean, clear shot at a high degree of affluence with a fair promise of achieving that state in the shortest possible span of time. My final goal is freedom. I want enough money to totally change my life and outlook. Anything less is treading water. My cosmic goal is to defeat time by heavy spending. I want to indulge every whim without anxiety, guilt, or other concern. Just in case others become involved in my life, the amount must be expensive enough to include their present and reasonable future. We're talking big bucks, Mr. Barn."

"Tell me, Mr. Berman, is that \$65,000 a substantial portion of your total assets?"

"Very substantial. I have some additional funds, liquid and temporarily frozen. Keogh. IRA. The apartment.

Enough for medical emergency."

"I want to dissuade you from excess," said Mr. Barn.

"Define excess and you might dissuade me. Not easy. I am a certified public accountant, Mr. Barn. What life has taught me is that the greatest excess is too little when the final prize is the control of one's destiny."

"Loss is anguish," said Mr. Barn.

"Negative. Loss is no more than breaking even. The real loss is linked to a life of predictability. I want to be able to afford surprise. I have nothing to lose except my chains, as Karl Marx said — or was it Engels, except he said it facing in the wrong direction."

"Getting down to cases, Mr. Berman, we move in the fast lane at Anatomical Ventures. The original name for our organization was Anatomical Adventures. We were afraid that might put off a certain kind of investor. We are reputable. We have all the correct credentials. But trading with us is indeed an adventure."

"Trading what?" said Berman. "I'm still in the fog as to what you people buy and sell."

"I'm about to share that small detail. But I want you to fully understand that we are talking in confidence. In fact, we require all clients to sign a pledge of silence directly modeled after the documents signed by every potential member of the Central Intelligence Agency. You know, we were quite upset with Miss Forbish for giving you our phone

number. She was out of line."

"Jane? Please. It was totally innocent. And she knows very little even after laying out your pamphlet. The copy is obtuse. Tantalizing, I admit. It got me here. But murky. I gather that was intentional."

"Here is the form. As you'll see, it's quite legal and binding. And not obtuse. It says that if you talk or write about any of your dealings with Anatomical Ventures, Ltd., you will be subject to very severe penalties, some of which are listed."

"Some of wbich are listed? Ominous."

"If you have any qualms, Mr. Berman, don't sign."

Berman signed with the pen he would have used to sign treaties if he were president. It had come to him from his father, a modest inheritence. The pen used ink. Mr. Barn watched the ink dry. Berman wondered if the man had ever seen actual ink.

"You have a very fine handwriting," said Mr. Barn. "The letters are firm and well formed. That tells me you are not a nervous man."

"I'm an apprehensive man but not nervous. Discovering black holes in outer space didn't faze me. I suspected something like them. I am an optimist who anticipates the worst. And somewhere inside myself I sense there is a winner waiting to break free."

"Anatomical Ventures, Ltd., deals in body parts, Mr. Berman."

"Beg pardon, Mr. Barn. Could you run that past me one more time?"

"We're in the Transplant Exchange. New York. Los Angeles. Chicago. Dallas. Paris. Rome. London. Berlin. Bern. Mecca. Tel Aviv. Rio. Mexico City. Soon others."

"I didn't know such a thing existed."

"It was inevitable. Consider. People need tranplants. Corneas. Livers. Kidneys. An occasional pair of lungs and a heart. All well within the realm of modern medicine. And future possibilities ... unlimited. Oh, I know we read about mechanical devices to replace nature's own, but what mechanical device is as good as the real thing?"

"I can't think of any."

"Exactly. And if some future technology comes along to put us out of business, I suppose Anatomical Ventures could always gear into fast foods." Mr. Barn chuckled. It was a company joke. Berman managed a smile. "Right now, there's tremendous opportunity in transplants. The Transplant Exchange is flourishing. Life and death are involved here, Mr. Berman. What has more value to a failing body than a pink, functioning organ? Nothing."

"I thought people donated that sort of thing."

"They do. It's one of our major problems. But folks are wising up. They're coming to realize that there might be a fortune in Aunt Irma's container." "Container?"

"A euphemism. The word body is rather crude. And we are neither crude nor crass. We simply accept the fact that more and more donors are being listed by themselves or their relatives on the Transplant Exchange. We merely act as brokers, not judges."

"Is any of this legal?"

"Perfectly. But in the current primitive climate, we think it best to be discreet. Mr. Berman, the bottom line is that you can invest in body parts and fill your treasury if you act wisely. The market rises and falls very rapidly. There's the normal demand; sudden outbreak of disease; mass disasters; a variable accident rate, especially around holidays; and so forth. It's an exhilarating roller coaster. And however you feel about dealing in the product, it can give you what you say you want."

"Objectively, it's not much different from buying shares in defense stocks. I can go along. How do I begin?"

"I'll escort you to our trading center. But first, please sign your check over to Anatomical Ventures, Ltd., and we'll establish a line of credit. Say, \$100,000, all things considered."

"Do I get chips?" Berman said.

"That's amusing," said Mr. Barn.
Berman followed Mr. Barn down a
long corridor, past many doors, and
finally, through a carved wooden door
that reminded Berman of a cathedral.
The room he entered was in violent

contrast to the leather, wool, and wood world he had left. It was a large room, a crescent in shape. The crescent's rim was made up of display screens flashing numbers in different colors. Below the bank of screens were rows of desks where at least fifty men and women shouted into telephones. The remainder of the room was a theater with splendid Lucite and fabric chairs rising on ascending platforms. Most of the chairs were occupied by men and women of all ages, shapes, and sizes. As the figures changed on the display screens, there were moans and squeals from the chamber, and from time to time one of the audience would jump screaming out an order to a clerk. In response, the clerk below would shout, "Done."

Berman was led to an empty chair. One winged arm held a small computer with its own display panel. "There are pressers and yellers," said Mr. Barn. "Actually, all that howling is amusing but anachronistic. Old habits die hard with some of our clients. All you have to do is use these keys to buy or sell. It's quite elementary. The keys are clearly marked. For example, Mr. Berman, suppose you decided to buy a hundred livers. You would first press BUY, then LIVS, then 100, then AG for age group. Prices vary for youthful livers and old livers. That's true for all organs, of course. So it would be key A for the 1-10 age group, B for 11-20, C for 21-30, D for 31-40, E for 41-45, F for 46-50, G for 51-55, and H for 56-plus. The current price of your trade, including our modest commission, will flash on your screen. Then you press CONFIRM, the red key, and your order is accepted and executed. Of course, if the gospel spirit moves you, you can work off tension by jumping up and yelling out your order to Clerk 16. Believe me, it can be fun to do things the old-fashioned way. Oh, at the end of each trading day, which is six o'clock sharp, you receive a full statment of your account printed out right at your place. And since you have established a line of credit, you may begin trading at any time. One other thing. The R key is for refreshments. An attendant will come to take your order. Your account will be billed for food and beverages, with an automatic 15 percent gratuity. Naturally, profits and losses are to be reported on your tax return, but since I am talking to an accountant, that information seems rather redundant. I'm sorry. I deliver this introductory speech by rote."

"That's quite all right," said Berman. "Yes, I know about the IRS. In fact, I was recently audited. Valid expenses for specialized medical treatments were ignored. Despite my logical, reasonable, honest presentation of the hard facts...."

"Death and taxes, eh?" said Mr. Barn. He patted Berman's shoulder. Berman pulled away. The gesture was

too familiar. It was friendly, yet there was enough power in the pat to leave Berman sitting in his trader's chair. "Good luck, Mr. Berman. There's no substitute for luck."

"Thanks."

"Start slowly. Familiarize yourself. Feel your way. Wait until you are entirely comfortable. And you are entitled to a complimentary first cocktail."

Berman settled into his chair. He noticed a curious contradiction about the trading room. While there was the terrific sense of energy in the place, as if the filtered air were stirred by the beating wings of large birds, the source of that energy was hard to pinpoint. Yes, the clerks on the phones were animated, and ves, the changing screens contributed something to the mood, but the cumulative effect, the silent, perpetual explosions, the core of fire came from the traders themselves. Apart from the occasional jumper, the traders were virtually immobile. They sat bent to the computers on their chairs or looked glazed at the large screens on the wall. They seemed frozen by sudden lava. Yet the amazing energy rose in clouds from their bodies and fused like an angry ghost that filled the crescent with malevolent glee.

Berman felt relief when a young, ball-shaped man whose face glowed with what could only be a torrent of sweat flew from his seat and yelled, "Buy 1,000 Corneas at \$500." A wom-

an in her middle years stood in her place and faced the young man. "Sell 1.000 Corneas at \$5031/4." Berman shifted his focus to the CORNEA screen. Corneas blinked at \$499, then \$500½, then \$545. The man who bought Corneas bought more. The woman who sold Corneas sank back into her chair with a failed expression. Berman wondered why Corneas rose. He found the reason on the screen marked NEWS. A bulletin was being printed out about a killer smog in Los Angeles. Traders around the world obviously were betting on Corneas. They went to \$590. The sweating man sold his Corneas and made \$90,000. The woman who sold Corneas still had little faith in them. She shorted 800 Corneas and bought 200 Future Possible Eyes at \$5,600. Berman looked at his FUT POS key. From what Mr. Barn had said, Berman assumed FUT POS designated transplants still in the experimental stage. On the EYES board, it was quite clear that the \$5,600 Eyes were dated 12-31-98. Different Future Possible contracts were offered on Eyes. They varied greatly in price. Next year's Eyes were dirt cheap, but the price rose rapidly after that, peaked in 1998, then declined. The woman was betting on available Eye transplants near the turn of the century. The price held steady.

Berman made no trades in the first hour. Then he bought a few Corneas, which had come down again

to \$506, and one expensive Liver at \$23,000. The Corneas did nothing, but the Liver spurted. Berman sold the Liver at a profit of \$4,500. He kept his Corneas for the moment and concentrated on the NEWS screen.

The screen printed an item about research at Stanford University involving sectional brain transplants to a strain of white mice. A few cortices had survived for up to twelve days. Berman pressed FUT POS BRA. He bought ten Brain futures dated 5-1-89. at a mere \$4,788 each, and fifteen minutes later sold them at \$11,322%. Now Berman moved quickly into Kidneys, which he reguarded as the workhorse investment. He put \$18,000 into Kidneys in the 41-45 age group. Berman fidgeted, watching the large KIDNEY screen. Then middle-aged Kidneys inched up and pulled the 41-45 AG KIDS along. Berman found himself in the air howling, "Sell three KIDS AG 4145."

"Done."

Berman sat back, pressed R, and got lunch and his free Bloody Mary. His sandwich, a grilled cheese with tomato, was excellent, served with delicious coleslaw and a sour pickle. A sweet waitress served Berman. He added 10 percent to her built-in tip. Anatomical Ventures, Ltd., was well run. The little extras were what made the difference.

After lunch Berman had the urge to concentrate in Future Possibles. He bought heavily into Limbs, Fingers, Toes, and Breasts. He broke even on those trades; then, on a whim, he bought Tongues and Teeth. Tongues were definitely FUT POS, but Teeth had a board of their own. Berman heard a radio dentist say that tooth transplants were catching on. Both the Tongues and Teeth did very nicely. Berman sold TEE and TON and rolled over into HIR. Hair was volatile and only \$257 a head. Berman bought two thousand heads. Hair began to drop. Berman flexed, sold, and moved into FUT POS OVR. He got his Ovaries for \$34,000 even, and just as he Confirmed, the NEWS board printed out a report of a French atomic test in the Pacific. Since tumors result from such tests, Ovaries practically doubled. By three o'clock, Berman had a profit of nearly \$135,000.

Mr. Barn came to see him. "I'm impressed," Mr. Barn said. "Did you know something about Ovaries?"

"Just a hunch," Berman said. "An educated guess."

"Nicely done, in any case. Ovaries have been depressed for months. That trade took guts."

Berman didn't want praise, he wanted privacy. He knew he was on a roll. When Mr. Barn finally left him in peace, Berman plunged on Hearts. He had watched Hearts go up and down. It was evident that the imminent possibility of a mechanical substitute took its toll on the price. A young Heart was going for under \$60,000, which seemed an astonish-

ing bargain. Berman risked \$200,000 on young Hearts. When they tacked on \$13,000 each, Berman sold his Hearts and bought FUT POS GENS Males AG 21-30 for \$750 a scrotum. Berman had read that trouble in the Middle East could involve many nations in a small but furious war, and that could mean either a sudden need for Genitals the minute they could be transplanted, or it could mean an oversupply of Genitals. Berman played both possibilities. When his GENS rose to \$9871/2, he sold GENS and shorted. Sure enough, Genitals came under panic selling. Berman made \$476,000 and put the bulk of it into good old familiar Kidneys.

By this time, Berman's success was evident to others. He knelt over his computer to keep them from seeing his trades. Berman felt a delicious calm. He was as contained as an oyster.

While the war in the Middle East failed to materialize, it did rain heavily in the Far Western United States. Berman had a quick vision of mudslides, floods, and accidents. Brain-dead Californians would line the highways. Berman shorted Livers, Kidneys, ten Hearts, and a large block of Corneas. By five, Berman was a millionaire.

A few years ago, Berman could have called it a day. But now, after subtracting estimated tax, calculating the leftovers, dividing by what remained of his statistical seventy-five-year life-span, Berman saw that he

would have to do more trading, even with a controlled inflation rate. But he'd had a day's work, that was for sure. Berman pressed R and ordered a dry gin martini. It was crisp as winter air. Even the olive was good. Berman decided to call Jane even if it wasn't Thursday. She deserved a fine dinner.

Berman noticed the NEWS screen flash a bulletin. A scientist claimed that the meat supply might be tainted by insecticide. Berman responded by buying FUT POS BLAS in huge amounts. Bladders would certainly go up based on the news. They would surely pay for dinner.

But Bladders fell. A denial from the Meat Information Bureau was apparently believed by the naive traders. "How could they swallow such a pile of crap?" Berman muttered to his computer, watching Bladders dive. Bladders cost Berman \$670,000 before he gave up on them, and he found himself with a glossy face. If only he had left when he planned to. But there was no use in dwelling on wrong decisions, and plenty of time to find right ones. He was still comfortably ahead on the day, and there was still nearly an hour of trading time. "No," thought Berman. "Go home now. Come back tomorrow."

Berman stood up to leave. But instead, he heard himself shout an order for \$500,000 in FUT POS ELB. Everybody was playing tennis and they all screwed up their Elbows. Future Pos-

sible Elbows in the prime young-adult age groups, male and female, were certainly not expensive. They were too damn low at \$4531/4, so Berman bought.

He watched Elbow futures dive even as Knees and Hips achieved new highs. Berman bit the bullet and sold his Elbows, then went into older Intestines. They wavered but didn't budge. Berman swung to Rectums, back to Genitals, then gave up on Future Possibles, which seemed under pressure. Bone Marrow, that was it. But Bone Marrow went down, so Berman bought into a falling Spleen market. Spleens were bound to turn up along with Gall Bladders. They fell.

Berman's computer screen went blank. Mr. Barn came along soon after. "You seem to have had a bad run. You seem to be overextended, Mr. Berman."

"It started with Elbows. Jesus, Hips, Knees, everything else went up, up, up. Elbows went down. Go explain it. How much do I owe exactly?"

"As you realize, since your account was so substantial, we opened the door on your credit rating. You dipped into a deep pool. I'm afraid you owe us \$983,000 and change."

"Well, keep the change," said Berman, laughing. "Look, I need more credit"

"Now that could be difficult."

"But I told you I was loaded with assets other than liquid. No problem.

I mean, in addition to the CDs, IRA, Keogh and annuities, there's the condo."

Even as Berman spoke, the NEWS screen flashed word of trouble at a nuclear power plant in Rangoon. He knew Bone Marrow would rise in response to a possible leukemia increase, but the smart money would go to Future Possible Stomachs, Larynges, and Esophagi. Ulcers and smoking-related diseases would be the quickest beneficiaries of the pending disaster, which could only produce stress. But Berman had no money. He couldn't move to the moment.

"We will make a small exception in your case, Mr. Berman, and extend you a credit line not to exceed \$100,000, at an interest rate determined by the day's bank rate plus two little points. Is that agreeable?"

"Yes. Done," Berman said, signing a paper. He immediately ordered STOMS, LRGS, ESOPI, and sat back to watch the numbers. As he anticipated, Bone Marrow went up a few points, then slid, while Stomachs, Larynges, and Esophagi rocketed. When he had a profit of \$400,000, Berman pressed SELL, but then he pressed CANCEL SELL. Why sell on a boom? But the floor slipped badly under Berman's holdings. First STOMS, then LRGS, then ESOPI lost heavy ground.

Berman was wiped out. If he were to liquidate everything including his mother, he would hardly cover his debt to Anatomical Ventures, Ltd.

In a small cubicle off the trading room, Berman told Mr. Barn, "I know it sounds dire, but you must remember that I not only have excellent earning capacitiy but an enviable tax loss. In a few years...."

"A few years? Mr. Berman, let me level with you. I am personally acquainted with a wealthy industrialist in urgent need of one perfect testicle. While testicle transplants are at a very early stage, he is willing to pay a fair price. And he wants a fresh one from a healthy donor. I could put the order on the board. On the other hand, we have a surgery on premises, and the procedure is quick and painless."

"You want me to sell my balls?"

"Just one. Your choice. We are talking upward of six figures and a little more."

"A little more? How much more?"
"Say, ten thousand over debt. You can walk out of here with something."

Twenty minutes later, Berman was back in the trading room. His operation left small discomfort, but he could avoid that by sitting in a crouch. He still had one testicle, sufficient for his Thursday sex life. Mr. Barn had given him a credit line of \$15,000, which was not very much but enough to recoup some of his losses. Unfortunately, Berman traded Kidneys, and it was as if nobody in the world needed Kidneys anymore. Kidneys collapsed.

That misfortune sent Berman back

into surgery, where he sold a kidney of his own. That trade again broke him even and left him with a new credit line. On a hunch, after looking at the waitress who brought him another martini, Berman bought 282 Future Possible Nipples. Just as he finished programming his order into the computer, the NEWS screen announced the development of a polyvinyl nipple that was safe, durable, and easily affordable. Berman asked to be wheeled back into surgery. He negotiated a nice arrangement with Mr. Barn as he was anesthetized, and when he woke from his operation minus an eye and ten teeth, he was back in the trading room wired neatly to some kind of machine. He still had full mobility and bought Future Possible Lips. LPS went up six points. Berman sold and bought into Cervices. They rose nicely, and Berman was feeling more confident. It was nearly 5:35, but there was time enough. Berman invested in Duodena, and that proved a disaster. Mr. Barn offered a fair deal on Berman's remaining testicle. Berman sold it on condition that it be removed at the chair with local anesthesia so that he could continue to trade. The surgical team accommodated him, and Berman traded Clitorises in a kind of bizarre gesture toward Joan. Their sex life would be severely modified considering, but there was always the chance that he might grow rich and buy himself a brand-new pair of balls. He

punched in his order with fatalistic calm and blinked with his one eye as Clitorises bottomed out. Mr. Barn offered Berman a tremendous price for his second kidney. Berman took it, on the same conditions for removal. He was laid on his belly right in the trading room. Even as his kidney was taken, he bought into Inner Ears, but the whole market sagged.

After his bad run in INEARS, Berman bargained a package that included his scalp, pubis, a few yards of lower bowel, and his rectum. Prices had dropped with the market crash, but he was still in business at 5:55.

Berman's last trade, the one that cost him his remaining eye, his limbs, and heart, was a desperate move into Thyroids, Epiglottises, and Adrenals. There was no demand.

At six, when the exchange closed with the sounding of a traditional bell, there was hardly enough left of Berman to cremate. What remained could have been carried in an ashtray. But instead, Mr. Barn personally authorized use of a carved Baccarat urn and arranged for a messenger to de-

liver the skimpy pile of Berman's charred dreams to Jane Forbish. The messenger lost them on a crowded bus.

Berman's organs performed perfectly for several grateful receivers. He won certain fame as a donor. Ironically, the mogul who got Berman's left testicle met Jane Forbish at a dinner party quite by chance. They were married. Neither knew anything of the incredible coincidence, but Thursdays became important in their lives.

Jane thought of Seymour Berman from time to time. She assumed he had struck it rich, tired of her, and went off to some exotic place like Tahiti. At first she had been furious, then just angry, and finally, accepting and compassionate. And she was watched over by Berman's ghost, in bits and pieces, which did its best to protect her from harm. From another world, Berman would sometimes yell like a trader at the Transplant Exchange, "I CAME CLOSE!" But there was too much interference to penetrate such barriers as exist.





Installment 4: In Which We Discover Why the Children Don't Look Like Their Parents

Pinter works, though he shouldn't; and I'll be damned if I can discern why; he just does. Bradbury and Hemingway don't; and I think I can figure out why they don't, which is a clue to why Stephen King doesn't, either. Xenogenesis seems to be the question this time around, and if you'll go to your Unabridged and look it up, I'll wait right here for you and tell you all about it when you get back.

Time passes. Leaves flying free from a calendar. The seasons change. The reader returns from the Unabridged.

Now that we understand the meaning of the word Xenogenesis, let us consider why it is that King's books—as seemingly hot for metamorphosis as any stuff ever written by anyone—usually wind up as deranged as Idi Amin and as cruel as January in Chicago and as unsatisfying as sex with the pantyhose still on: why it is that

the children, hideous and crippled offspring, do not resemble their parents.

First, I can just imagine your surprise when I point out that this thing King has been around in the literary consciousness a mere ten years. It was just exactly an eyeblink decade ago that the schoolteacher from Maine wrote:

Nobody was really surprised when it happened, not really, not at the subconscious level where savage things grow. ... Showers turning off one by one, girls stepping out, removing pastel bathing caps, toweling. spraying deodorant, checking the clock over the door. Bras were booked, underpants stepped into. ... Calls and catcalls rebounded with all the snap and flicker of billiard balls after a bard break. ... Carrie turned off the shower. It died in a drip and a gurgle. ... It wasn't until she stepped out that they all saw the blood running down ber leg.

Second, I'll bet none of you real-

Copyright © 1984 by The Kilimanjaro Corporation.

ized what a fluke it was that King took off so abruptly. Well, here's the odd and unpredictable explanation, conveyed because I happened to be there when it happened. (Who else would tell you this stuff, gang?)

Doubleday had purchased CARRIE for a small advance. It was, in the corporate cosmos, just another midlist title, a spooky story to be marketed without much foofaraw among the first novels, the "learn to love your brown rice and get svelte thighs in 30 minutes" offerings, the books one finds in the knockoff catalogues nine months later at \$1.49 plus a free shopping bag. But King's editor read that opening sequence in which the telekinetic, Carrie White, gets her first menstrual experience before the eyes of a covey of teenage shrikes, and more than the lightbulb in the locker room exploded. Xeroxes of the manuscript were run off; they were disseminated widely in-house; women editors passed them on to female secretaries, who took them home and gave them to their friends. That first scene bit hard. It was the essence of the secret of Stephen King's phenomenal success: the everyday experience raised to the mythic level by the application of fantasy to a potent cultural trope. It was Jungian archetype goosed with ten million volts of emotional power. It was the commonlyshared horrible memory of half the population, reinterpreted. It was the flash of recognition, the miracle of that rare instant in which readers dulled by years of reading artful lies felt their skin stretched tight by an encounter with artful truth.

Stephen King, in one apocryphal image, had taken control of his destiny.

I'm not even sure Steve, for all his self-knowledge, has an unvarnished perception of how close he came to remaining a schoolteacher who writes paperback originals as a hobby and to supplement the family income in his spare time when he's not too fagged out from extracurricular duties at the high school.

But just as Ian Fleming became an "overnight success" when John F. Kennedy idly mentioned that the James Bond books - which had been around for years - were his secret passion; just as DUNE took off in paperback years after its many rejections by publishers and its disappointing sale in hardcover, when Frank Herbert came to be called "the father of Earth Day" and the novel was included in THE WHOLE EARTH CATALOG; just as Joseph Heller, Joseph Heller's agent, Joseph Heller's publisher and the Eastern Literary Establishment that had trashed CATCH-22 when it was first published, began trumpeting Heller's genius when another literary agent, not Heller's, named Candida Donadio ran around New York jamming the book under people's noses, telling them it was a new American classic; in just that inexplicable, unpredictable. magic way. Doubleday's

in-house interest spread. To *Publishers Weekly*, to the desk of Bennett Cerf, to the attention of first readers for the film studios on the Coast, to the sales force mandated to sell that season's line, to the bookstore buyers, and into the cocktail-party chatter of the word-of-mouth crowd. The word spread: this CARRIE novel is hot.

And the readers were rewarded. It was hot: because King had tapped into the collective unconscious with Carrie White's ordeal. The basic premise was an easy one to swallow, and once down, all that followed was characterization. That is the secret of Stephen King's success in just ten years, and it is the reason why, in my view, movies based on King novels never resemble the perfectly decent novels that inspired them.

In films written by Harold Pinter as screenplay, or in films based on Pinter plays, it is not uncommon for two people to be sitting squarely in the center of a two-shot speaking as follows:

CORA: (Cockney accent) Would'ja like a nice piece of fried bread for breakfast, Bert?

BERT: (abstracted grunting) Yup. Fried bread'd be nice.

CORA: Yes ... fried bread is nice, isn't it?

BERT: Yuh. I like fried bread.

CORA: Well, then, there 'tis. Nice fried bread.

BERT: It's nice fried bread.

CORA: (pleased) Is it nice, then?

BERT: Yuh. Fried bread's nice.

Unless you have heard me do my absolutely hilarious Pinter parody, or have seen every Pinter play and film out of unconstrained admiration for the man's work — as have I — then the foregoing copy cannot possibly read well; nor should it, by all the laws of dramaturgy, play well onscreen. But it does. I cannot decipher the code; but the cadences work like a dray horse, pulling the plot and character development, the ever-tightening tension and emotional conflict toward the goal of mesmerizing involvement that is Pinter's hallmark.

We have in this use of revivified language a sort of superimposed verbal continuum at once alien to our ear and hypnotically inviting. To say more, is to say less. It does work.

But if we use the special written language of Bradbury and Hemingway as examples, we see that such "special speaking" does *not* travel well. It bruises too easily.

Perhaps it is because of the reverence lavished on the material by the scenarists, who are made achingly aware of the fact that they are dealing with *literature*, that blinds them as they build in the flaws we perceive when the film is thrown up on the screen. Perhaps it is because real people in the real world don't usually speak in a kind of poetic scansion. Perhaps it is because we love the primary materials so much that no amount of adherence to source can

satisfy us. But I don't think any of those hypotheses, singly or as a group, pink the core reason why neither Bradbury's nor Hemingway's arresting fictions ever became memorable films. When Rock Hudson or Rod Steiger or Oskar Werner mouth Bradburyisms such as:

"Cora. Wouldn't it be nice to take a Sunday walk the way we used to do, with your silk parasol and your long dress whishing along, and sit on those wire-legged chairs at the soda parlor and smell the drugstore the way they used to smell? Why don't drugstores smell that way any more? And order two sarsaparillas for us, Cora, and then ride out in our 1910 Ford to Hannahan's Pier for a box supper and listen to the brass band. How about it? ... If you could make a wish and take a ride on those oak-lined country roads like they had before cars started rushing, would you do it?"

or Gregory Peck or Ava Gardner carry on this sort of conversation from Hemingway:

"Where did we stay in Paris?"
"At the Crillon. You know that."

"Why do I know that?"

"That's where we always stayed."

"No. Not always."

"There and at the Pavillion Henri-Quatre in St. Germain. You said you loved it there."

"Love is a dunghill. And I'm the cock that gets on it to crow."

"If you have to go away, is it ab-

solutely necessary to kill off everything you leave behind? I mean do you have to take away everything? Do you have to kill your horse, and your wife and burn your saddle and your armor?"

what we get is the auditory equivalent of spinach. The actors invariably convey a sense of embarrassment, the dialogue marches from their mouths like Prussian dragoons following Feldmarschall von Blücher's charge at Ligny, and we as audience either wince or giggle at the pomposity of what sounds like posturing.

This "special speaking" is one of the richest elements in Bradbury and Hemingway. It reads as inspired transliteration of the commonplace. But when spoken aloud, by performers whose chief aim is to convey a sense of verisimilitude, it becomes parody. (And that Bradbury and Hemingway have been parodied endlessly, by both high and low talents, only adds to their preeminence. They are sui generis for all the gibes.)

The links between King and Bradbury and Hemingway in this respect seem to me to be the explanation why their work does not for good films make. That which links them is this:

Like Harold Pinter and Ernest Hemingway, Ray Bradbury and Stephen King are profoundly allegorical writers.

The four of them seem to be mimetic writers, but they aren't! They seem to be writing simply, uncomplicatedly, but they aren't! As with the dancing of Fred Astaire — which seems so loose and effortless and easy that even the most lumpfooted of us ought to be able to duplicate the moves — until we try it and fall on our faces — what these writers do is to make the creation of High Art seem replicable.

The bare bones of their plots....

A sinister manservant manipulates the life of his employer to the point where their roles are reversed.

An ex-prizefighter is tracked down and killed by hired guns for an offense which is never codified.

A "fireman," whose job it is to burn books because they are seditious, becomes secretly enamored of the joys of reading.

A young girl with the latent telekinetic ability to start fires comes to maturity and lets loose her power vengefully.

... bare bones that have underlain a hundred different stories that differ from these in the most minimally variant ways. The plots count for little. The stories are not wildly inventive. The sequence of events is not skull-cracking. It is the *style* in which they are written that gives them wing. They are memorable not because of the thin storylines, but because the manner in which they have been written is so compelling that we are drawn into the fictional universe and once there we are bound subjects of

the master creator.

Each of these examples draws deeply from the well of myth and archetype. The collective unconscious calls to us and we go willingly where Hemingway and Bradbury and Pinter ... and King beckon us to follow.

Stephen King's books work as well as they do, because he is writing more of shadow than of substance. He drills into the flow of cerebro-spinal fluid with the dialectical function of a modern American mythos, dealing with archetypal images from the preconscious or conscious that presage crises in our culture even as they become realities

Like George Lucas, Stephen King has read Campbell's THE MASKS OF GOD, and he knows the power of myth. He knows what makes us tremble. He knows about moonlight reflecting off the fangs. It isn't his plots that press against our chest, it is the impact of his allegory.

But those who bought for film translation 'SALEM'S LOT, CUJO, CHRISTINE, CHILDREN OF THE CORN and FIRESTARTER cannot read. For them, the "special speaking" of King's nighmares, the element that sets King's work so far above the general run of chiller fiction, is merely white noise. It is the first thing dropped when work begins on the script, when the scenarist "takes a meeting" to discuss what the producer or the studio wants delivered. What is left is the

bare bones plot, the least part of what King has to offer. (Apart from the name *Stephen King*, which is what draws us to the theater.)

And when the script is in work, the scenarist discovers that there isn't enough at hand to make either a coherent or an artful motion picture. So blood is added. Knives are added. Fangs are added. Special effects grotesqueries are added. But the characters have been dumbed-up, the tone has been lost; the mythic undercurrents have been dammed and the dialectical function has been rendered inoperative. What is left for us is bare bones, blood and cliché.

It is difficult to get Steve King to comment on such artsy-fartsy considerations. Like many another extraordinarily successful artist, he is consciously fearful of the spite and envy his preeminence engenders in critics, other writers, a fickle audience that just sits knitting with Mme. Defarge, waiting for the artist to show the tiniest edge of hubris. Suggest, as I did, to Steve King that *Cujo* is a gawdawful lump of indigestible grue, and he will respond, "I like it. It's just a movie that stands there and keeps punching."

How is the critic, angry at the crippling of each new King novel when it crutches onto the screen, to combat such remarks? By protecting himself in this way — and it is not for the critic to say whether King truly believes these things he says in defense of the butchers who serve up the bloody remnants that were once creditable novels — he unmans all rushes to his defense. Yet without such mounting of the barricades in his support, how can the situation be altered?

Take for instance CHILDREN OF THE CORN (New World Pictures). Here is a minor fable of frightfulness, a mere thirty pages in King's 1978 collection NIGHT SHIFT; a one-punch short story whose weight rests on that most difficult of all themes to handle, little kids in mortal jeopardy. Barely enough there for a short film, much less a feature-length attempt.

How good is this most recent adaptation of a King story? Los Angeles magazine, last month, began its review of Firestarter like so: "This latest in a seemingly endless chain of films made from Stephen King novels isn't the worst of the bunch, Children of the Corn wins that title hands down." That's how bad it is.

Within the first 3½ minutes (by stopwatch) we see four people agonizingly die from poison, one man get his throat cut with a butcher knife, one man get his hand taken off with a meat slicer, a death by pruning hook, a death by sickle, a death by tanning knife ... at least nine oncamera slaughters, maybe eleven (the intercuts are fastfastfast), and one woman murdered over the telephone, which we don't see, but hear. Stomach go whooops.

Utterly humorless, as ineptly di-

rected as a film school freshman's class project, acted with all the panache of a grope in the backseat of a VW, Children of the Corn features the same kind of "dream sequences" proffered as shtick by Landis in An American Werewolf in London, De Palma in Carrie and Dressed to Kill, and by even less talented of the directorial coterie aptly labeled (by Alain Resnais) "the wise guy smart alecks." These and-then-I-woke-up-and-it-hadall-been-a-bad-dream inserts, which in way advance the plot of the film, are a new dodge by which Fritz Kiersch, Corn's director, and his contemporaries - bloodletters with viewfinders — slip in gratuitous scenes of horror and explicit SFX-enhanced carnage. This has become a trope when adapting King's novels to the screen. a filmic device abhorrent in the extreme not only because it is an abattoir substitute for the artful use of terror, but because it panders to the lowest, vilest tastes of an already debased audience.

It is a bit of cinematic shorthand developed by De Palma specifically for *Carrie* that now occurs with stultifying regularity in virtually *all* of the later movies from King's books.

I submit this bogus technique is further evidence that, flensed of characterization and allegory, what the makers of these morbid exploitation films are left with does not suffice to create anything resembling the parent novel, however fudged for visual translation. And so fangs are added, eviscerations are added, sprayed blood is added; subtlety is excised, respect for the audience is excised, all restraint vanishes in an hysterical rush to make the empty and boring seem exciting.

Children of the Corn is merely the latest validation of the theory; or as Cinefantastique said in its September issue: "King's mass-market fiction has inspired some momentous cinematic dreck, but Children of the Corn is a new low even by schlock standards."

Of the nine films that originated with Stephen King's writings, only three (in my view, of course, but now almost uniformly buttressed by audience and media attention) have any resemblance in quality or content—not necessarily both in the same film—to the parent: Carrie, The Shining and The Dead Zone.

The first, because De Palma had not yet run totally amuck and the allegorical undertones were somewhat preserved by outstanding performances by Sissy Spacek and Piper Laurie.

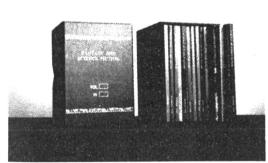
The second, because it is the vision of Kubrick, always an intriguing way of seeing, even though it is no more King's *The Shining* than Orson Welles's *The Trial* was Kafka's dream.

The third, because David Cronenberg as director is the only one of the field hands in this genre who seems artistically motivated; and because Christopher Walken as the protagonist is one of the quirkiest, most fascinating actors working today, and his portrayal of Johnny Smith is, simply put, mesmerizing.

But of *Cujo*'s mindlessness, *Christine*'s cheap tricks, *Firestarter*'s crudeness, *'Salem's Lot*'s television ridiculousness, *Children of the Corn*'s bestial tawdriness and even Steve's own *Creepshow* with its intentional comic book shallowness, nothing much positive can be said. It is the perversion of a solid body of work that serious readers of King, as well as serious movie lovers, must look upon with profound sadness.

We have had come among us in the person of Stephen King a writer of limitless gifts. Perhaps because Stephen himself has taken an attitude of permissiveness toward those who pay him for the right to adopt his off-spring, we are left with the choices of enjoying the written work for itself, and the necessity of ignoring everything on film ... or of hoping that one day, in a better life, someone with more than a drooling lust for the exploitation dollar attendant on Stephen King's name will perceive the potential cinematic riches passim these special fantasies. There *must* be an honest man or woman out there who understands that King's books are about more than fangs and blood.

All it takes is an awareness of allegory, subtext, the parameters of the human condition ... and reasonable family resemblance.



Handsome, Sturdy
VOLUME FILES

for Your Copies of

## FANTASY AND SCIENCE FICTION

Each Volume File will keep 12 copies of FANTASY &

SCIENCE FICTION clean, orderly and readily accessible. Sturdily built, the files are covered with a rich black and red washable leatherette, and the lettering is in 16-carat gold leaf.

Reasonably priced at \$6.95 each, 3 for \$20.00 or 6 for \$36.00, they are shipped fully postpaid on a money back basis if not satisfactory, Order direct from:

JESSE JONES BOX CORPORATION

Dept F&SF P.O. Box 5120

Philadelphia, Pa. 19141

Two people in a small space, over a long period of time, can put a hole in the best of friendships, as we see in this humorous poem. Anne Jordan is an assistant editor of F&SF and has previously published poetry in Asimov's.

## The Spacing of Fred McNerth (with applogues to Robert Service)

## ANNE D. JORDAN

It's a strange, dark place, the dead of space,
But the men who cross it are stranger;
The vacuum trails have their secret tales
And the void is filed with danger;
The stars' bright lights have seen weird sights
But the sight that to me was the worst
Was that night on a run toward the good old Sun
I spaced old Fred McNerth.

Now Fred McNerth was from the planet Earth, where humankind started and grew;

Why Fred left his green home, the stars to roam, great God only knew. He was always afraid, but the bucks he was paid seemed to hold him like a spell;

Though he'd often say in his whining way that "spacing was next to Hell."

It was the sixty-fifth day of pushing our way on the Neptune-Mercury run; Talk about dull! We'd hit a lull where nothing was any fun.

When our eyes we'd close, the boredom rose and grew like a fat lady's girth; It was enough to cause cursin', but the only person to whimper was Fred McNerth.

And that very night, as we lay packed tight in that smelly, dirty ship, I knew in my head I couldn't stand Fred on another bloody trip. He turned to me, and I could see how loathsome he'd become; There was so much to disgust, not to mention distrust, about the whining crumb.

To enumerate, he cursed his fate and the fact he'd ever left Earth; He was homesick bad and it drove him mad. He'd have given all he was worth To get back there, or at least give it a stare, if the distance wasn't so vast; But his other ways were what numbered his days and finally brought on his last.

Fred thought it posh never to wash, and his breath would floor a moose; He picked his nose and sucked his toes and was always hitting the juice; He'd bore you dead with his feats in bed with, he claimed, half the women on Earth,

So that night as I eyed that slob I devised a plan to space old Fred McNerth.

The idea of this deed grew like a seed, and I swore I would not fail; So I told McNerth that he could see Earth if he perched on our old ship's tail. Fred's suit had a hole to accomplish my goal before he would ever spot Earth, And before he could call, a corpse was all that was left of Fred McNerth.

What was a bust was Fred had no thrust; to be rid of him had been my goal, But when Fred breathed his last, he didn't float past, but floated by the porthole.

There wasn't a breath in his grin of death, but still it seemed to say: "You promised me Earth, so, for better or worse, 'til I see it I'm goin' your way."

Now a promise made is a debt unpaid, and space has it own stern code. In the days to come, though my lips were dumb, in my heart how I cursed that load.

In space's long night, by the stars' harsh light, the rockets glowed cherry red, And their hellish hue seemed to accuse — Oh, God! how I hated old Fred.

And every day that quiet clay seemed to merrier and merrier grow; And on I sped though the computer went dead and the grub was getting low; Being alone was bad and I felt half-mad, but I swore I would not give in; And I'd often sing to the hateful thing, and it hearkened with a grin.

'Til I passed the green haze in which Venus lays, and the Sun was a burning beam;

The heat was intense 'cause the cooling went and the air was almost steam. Through the porthole, though, Fred seemed to glow in an aura of hard radiation;

He seemed to live, though his suit was a sieve, and to grin with exhilaration.

I do not know how long in his glow I wrestled with grisly fear;
But the jets had gone out, and the ship turned about ere again I got into gear.
I was sick with dread, but I bravely said: "I'll just see if his radio's gone.
He's gotta be dead, the sun's scorched him beet red"; ... then I turned the radio on.

And Fred's voice came through, cool and true, over the radio's static ring; And he wore a smile you could see a mile, and he said: "Turn off that goddamned thing.

You go your way; I'm gonna stay, so just quit bending my ear.

I ain't had this much fun on the whole damned run — and I can see Earth real clear."

It's a strange, dark place, the dead of space,
But the men who cross it are stranger;
The vacuum trails have their secret tales
And the void is filled with danger;
The stars' bright lights have seen weird sights
But the sight that to me was the worst
Was that night on a run toward the good old Sun
I spaced old Fred McNerth.



Systems of belief can and are based on everything from a vision to a tangible object. Richard Mueller gives us an amusing story of a computer, a woman and their encounter with the religion of some "hod"-headed "gloots."

## Finnegan's Fake

### BY RICHARD MUELLER

#### 21.2.1 NONREENLISTMENT

In the event that an enlisted man (woman, being) does not opt for reenlistment; and no state of war, war alert, or Class A Emergency exists; said enlisted man (woman, being) shall be separated forthwith with all due payments and benefits, personal property and savings accrued. Regarding planetary stations, this is selfexplanatory. Personnel serving aboard orbital or coordinate stations shall be provided with one-way transit via the next scheduled logistics run. Personnel serving aboard cruising, fleet, or survey units shall be separated from the service upon arrival at next planetfall.

"Come on, Jonesy. Get your gear together. We're down."

She shook her head experimentally and found that it was still attached — loosely to be sure, but still connected. The impact field was off. Grog-

gily, she climbed out of the static tank, banging one knee on the rim, letting her eyes focus. Chief Moody was scowling at her.

"I tole you an' I tole you not to go to sleep in the tank. Sart, it's not my problem anymore. Come on, get your gear. We're here."

The tips of her nose and ears tingled as the blood returned to them "Where's here?"

"Canjuro, dammit. You're home."

"My home is in Pennsylvania," she muttered, pushing the hair back from her face and moving stiffly to collect her starbag and kit. Canjuro. She remembered: showing the flag, hunting pirates among the mining worlds. A desert planet, colonized by Aussie and Italian miners. And many, many light-years from Pennsylvania. But under FedRegs it was either get out now or re-up. Destroyers weren't set

Finnegan's Fake 109

up to carry passengers. Canjuro it was.

"Jonesy, cut that whistling."

"Was I whistling?" And don't call me Jonesy.

"You know damned well you were. You ain't a groundhog yet. Not till 1100."

She leaned her head into her hand and sighed. "Look, Chief, can't we relax? I'm mustering out, you're going on. Can't we part friends?"

Moody gave her a long, sour look, then groaned, "Come on." She gave up. It was like trying to pump electricity through a rock.

The pay officer transferred 11,450 credits to her personal account: savings and separation.

The chief storekeeper signed over her possessions.

The yeoman handed her a Ceremonial Discharge Facsimile, Honorable, and recorded the information in the ship's bank, the Canjuro port records, and in her own personal compunit.

The captain shook her hand and made the standard speech: good service rendered, many regrets on losing you, etcetera. She managed to stay awake through it.

Her section (NavCon) shook her hand all around and promised to look her up for a drink if they got liberty. Not likely.

And she and Chief Moody stepped down on the surface of Canjuro. It was enough to give her a good scare. If there had been a tourist brochure for Canjuro, she was willing to bet that it would have been left blank. Or at least all printed lies and no pictures. The port was flat-hammered red clay, cracked and dusted, with just enough wind to raise a permanent cloud. Intermittently through the blowing gunk she could see the control tower and the squat outlines of ships. She hoped that one of them would be leaving for Pennsylvania. Soon. She would be on it.

"Charming," she said through clenched teeth. Moody was loading her gear on a baggage cart. It had three wheels, no paint, and was pedaldriven.

"How about it, Moody? Did you plan this? There are nicer worlds in our sector."

Moody shrugged and passed her a pair of dust goggles. His own were already in place.

"You know regs, Jonesy. Fleet don't consult with me about patrol patterns." He cocked a thumb toward the *Talavera*'s pitted, curving hull. "We don't leave for thirty-six hours. You can always re-up."

"You don't think I can make it on the outside, do you?"

He regarded her critically. "No, lady, I don't. Navy's a good life. That, out there ... that's a mess. I think you'll be back."

"Moody, I just may surprise you. Now point me toward the town and wave bye-bye."

he "town" turned out to be the port facilities, six cheap saloons, one expensive hotel, and a scattering of dusty shacks and mining offices. After managing to avoid a pack of bottlegreen Gloots who were tormenting the bellboy over some imagined slight. she left her baggage with the desk clerk of the San Remo and decided to check out the bars. It was a mistake. She was used to spacer bars: rude. but with a definite set of rules and a crude sense of chivalry that gave an element of protection to women. Especially servicewomen. The bars of Il Marsupiale (the Italians had arrived first) knew no such rules. She quickly discovered that there were only eight women in a town that boasted a population - including the mines - of over 1.700 men. Two were executives (armed and married) of the Wallaroo Mining Consortium (the Aussies had better business sense), and six were very tired whores. After fifteen minutes of both kinds of proposals, she retreated to her hotel room, locked herself in, ordered a meal, champagne, and bath and gave up on Canjuro.

Later, after a good scrubbing, she stood before the full-length mirror in her suite and treated herself to a critical appraisal. I'm twenty-nine, she thought. Eight years of service, a good education, qualified pilot-navigator. I

could get a job with any system-hauler on Terra, run shuttles, freighters, make a good wage, live at home. Terra. Earth. She listened to the grit spattering her windows and wondered if they still had trees in Pennsylvania.

She placed her hands under her breasts. My body's firm. I've kept up on my exercises. I could even bear children, if I found the right man. She made a mental note to call the tower in the morning, book passage on the first ship out.

The meal was passable, the champagne excellent. She had another bottle and went to sleep without turning down the bed, dreaming of trees and water.

"Nine hundred fifty credits?"

"Si signorina. Five hundred for the room, 100 for the meal, 100 for each champagne, and 150 for the bath"

One hundred fifty for a bath! She realized what the smell in the saloons had been. "Is there a flat rate for room and meals?"

"Si, 750 credits per day."

"Sart!"

"Signorina?"

She did some hasty figuring. That would last her fourteen days if she spent nothing else and stank. She called the tower.

"When's the next ship leaving?"

"Where to, miss?"

"Anywhere toward Earth."

A pause.

"The Queen Victoria stops 'ere in five days; bound for Loosestrife, Vardan, New Britannia, and Terra. Ten thousand credits to Terra."

"Ten thousand? What is she, a liner?"

"Yes, miss."

"When's the next one?"

"Twelve days."

"How much?"

"Two thousand."

She hung up. She was screwed. Of course she could accept passage to a point short of Terra, but she knew no one on any of those worlds. She'd just wind up stranded someplace, with no creds.

Of course there were other ways. She could capitalize on her looks, her body, either here for sure or possibly aboard the *Queen Victoria*. No. No, dammit, no! Sart! I'm qualified and skilled. There had to be another way, if she just put her mind to it.

That night she watched the *Talavera* lift, burning up and away through the dust. Moody had called two hours before and asked if she'd wanted to re-up. Four more years. She needed little thought to refuse. She was on her own.

"Yes, miss?"

"Are there any ships on the field?"

"Yes, miss. Two dust barges, a short-haul scavenger, and a for-hire. Would you like the numbers?" "Yes, please."

She took them down. The dust barges were worthless, and the shorthaul was only a slim grade above a pirate. She was willing to bet that it hadn't been here while the Talavera was grounded. Probably hiding on the other side of Canjuro. But the for-hire....

"Say, miss, if you wasn't doing anything later..."

"Uh, sorry. I'm occupied."

She dialed the number for the ship. The recording that answered proclaimed that the vessel — HMC1141C, One-Eyed Reilly, out of Couplet — was not currently accepting assignments, but, if the caller would leave his or her number, the call would be returned. She gave her number and broke the circuit.

Now, what to say. How to talk herself aboard without compromising her integrity. Perhaps they needed a steward, or a cook. Hell, a handler. She was strong. Or, in the last resort, maybe she could buy in as supercargo. Canjuro had no picture phones, so her voice would have to carry the sale. If she got an interview, then she'd need to look beautiful. Nervously, she cleared her throat and waited. Ten minutes later, the phone sounded.

"Uh, hello."

"Am I speaking with Lavinia Jones?" The voice was well modulated, pleasant, self-assured.

"Yes, though my friends call me

Vinnie." Damn, that was wrong.

"Well, Vinnie, I presume that you're answering my advertisement, though I just this minute posted it."

She froze. Advertisement? This was too good to be true? But for what?

"Yes, but I was wondering if you could give me ... a fuller description."

"Certainly." God, his voice sounded handsome. She began to wonder what he was like. Was this to be some sort of fairy tale come true?

"The Reilly is a 2,400-ton, deepspace courier pinnace of the Cristagon type, constructed on New Britannia six years ago and fitted out on Couplet. We haul passengers, freight, anything legal, anywhere legal. Currently we're under contract to ship a load of religious pilgrims to Ebeneezer...."

Religious pilgrims? On Canjuro? She was lost. How could she worm out of him what he wanted? — better yet, what he wanted to hear.

"About the position...."

"Oh, I'm sure you're quite qualified. Our plant is actually just a scaled-down version of the *Talavera*'s. Shall I send my steward around to pick you up?"

"Uh, yes." *Talavera?* He must have already read her discharge data in Canjuro's bank. But what position?

"Excellent. I'll be looking forward to seeing you."

"Likewise, Captain...."

"You may call me Skipper," he said, and broke the connection. Skip-

per. He was the informal sort, but was that a title, or a nickname? She wasn't even sure that he was human. Vardanians could sound remarkably like humans if they didn't laugh. Suddenly she could not remember if he had laughed.

She dressed quickly, trying to strike a balance between beauty and capability. Trying to keep her mind off the interview, trying to relax, she still jumped when the bell rang. Nervously, she straightened the cut of her blouse and opened the door.

Standing before her was a rather dumpy robot.

"Yes?"

"Ms. Lavinia Jones, M19199L; late of the destroyer *Talavera*?" it asked stiffly.

"Yes."

"I am Scooter, steward of the pinnace One-Eyed Reilly. Would you come with me, please?"

A robot steward? She followed the little construct out through the lobby of the San Remo, ignoring the curious stares of the desk clerk and bellboy who had ceased arguing with a pair of Gloots to give her their full attention. Outside, they boarded a small ship's floater, Scooter engaged the controls, and they drifted toward the field.

"Scooter?"

"Yes, Ms.?"

"What exactly does this position entail?"

"It was on the advertisement, ms."

Hmmm. "The advertisement wasn't clear."

"Yes, it was," Scooter replied smugly. "I wrote it."

Vinnie saw that she was going to have trouble with this one if she didn't nip it in the bud. "Look. If I get this job, will I outrank you?"

"Yes, ms. Of course."

"Then Override, and answer the question."

"Aye, aye, ms.," it sniffed. "The position is executive officer/second pilot."

She was stunned. Executive officer. She'd been only a PO2 on the *Talavera*, but then, it was a much smaller ship. "How many in the crew?"

"Three: Skipper, the executive officer, and myself. And the maintainance robots, of course." Scooter obviously did not consider himself a robot. They pulled out of the dust to reveal the sleek, cylindrical hull of a pinnace, and Vinnie hopped down. Scooter took his time about parking the floater, then joined her at the lock, which rolled back.

"Welcome aboard, ms."

The interior was dully lit in red, which changed to soft white as she entered, Scooter clicking along behind. At the juncture was a com pick-up with a lighted indicator. The speaker chimed softly.

"Ms. Jones, welcome to the *One-Eyed Reilly*. If you'd come forward, we can talk over the position. Scooter, if you'd see to the passenger sec-

tion, our charter group will be coming on board momentarily."

She passed through the galley, crew quarters, and com-records without finding anyone. The door to the bridge opened as she approached it.

"Come up forward, Ms. Jones."

The cockpit was a two-seater; compact and efficient, yet elegant. It was also empty. She stood for a moment, watching the red dust eddy past the curving windows.

"All right, what's going on here?"

A speaker indicator was glowing on the panel. "Sit down please, Ms. Jones."

"Where are you?" she asked cautiously, easing into the left-hand couch.

"How do you like the Reilly?"

"Lovely. First-rate. I...."

"Do you think you could pilot her?"

"I know I could. Where are you?"

"Fine. The position's yours."

"Thank you, I.... Where are you?"

"Неге."

"Where?"

"I am the Reilly."

e is the *Reilly*? "Are you saying that you're ...?" Skipper chuckled softly. The sound was alarmingly human.

"How much do you know about Couplet?"

"The planet? I've never been there."

"But you do know of the Cymanci-

pation Act. Under the terms, machine intelligences that had reached a certain level of sophistication could, upon application, receive equal legal citizenship with the organic inhabitants. The inhabitants considered this to be both logical and a great joke upon the Federation. The inhabitants were Vardanians, so this was not surprising.

The decision was debated hotly in the Federation Chambers, and a resolution was put forward to censure Couplet, many of the members nervously contemplating a revolution by their own cyberservants. Vardan of course vetoed the censure motion (Couplet had originally been a Vardanian colony), and the situation was defused when Couplet revealed that the number of computers that could pass the stringent requirements was painfully small. Indeed, there were only six, and they were huge and immobile constructs, none of which had shown any interest in making application in the first place. Couplet had had its joke and things quieted down.

"But I thought that none of the six..."

"Very good!" Skipper replied brightly. "You know your history. No, Vinnie. None of the stationary units — there are ten now — are interested. At any rate, they would scarcely fit inside a pinnace, even if they wished to. The big installations are rather sedentary. Stuffy. They have no interest in adventure, but you're getting warm."

"Cyborgs?"

"Again, close. No. In spite of what the Futurists have been predicting since the Second Age — your twentieth century — neither humans nor Vardanians have succeeded in making the transition without rapid degeneration, insanity, or both. But I am, in a sense, indeed a cyborg."

Vinnie's knowledge had been overrun. She sat quietly, listening, hoping that whatever Skipper was, he was safe. But if the *Reilly* had been in commission for six years, the scientists on Couplet had obviously licked the problem. No cyborg had ever lasted six months. Six years was unthinkable.

"Couplet was not uninhabited when the first Vardanian ships reached it four hundred years ago. In addition to the lower forms, there was a dominant species known as the T'chlen. The T'chlen are not a corporeal race. Rather, they exist in a gaseous form, somewhat akin to the Medusan parasites of Titan, or the Will'o'Wisp of the Venturi worlds, but, unlike them, both sapient and civilized. In fact, I like to think genteel," he said with a soft chuckle.

"The T'chlen spend most of their time in a gaseous state, but they can, if they wish, inhabit and control the body of an animal. Or a Vardanian, or — I have no doubt — any higher form."

"That sounds ghastly," Vinnie blurted.

"Oh, it is. And wrong. The T'chlen are an ethical race and take no higher being against its will, though they sometimes animate corpses, and I find *that* ghastly."

"Took the words right out of my mouth," Vinnie muttered. "Then you are a T'chlen?"

"Partly. Actually, I'm a T'chlen data bank combination. The Vardanians, using Vardan-human technology, designed the interface that allows me to operate this ship, to converse through this voder-vocoder system, to leave the surface of Couplet and adventure. That sounds a bit pompous, I know," he said shyly, "but some of the T'chlen long for more than peaceful philosophizing and drifting about the swamps, goosing small animals and swapping lies with the Vardanians."

"Fascinating," Vinnie said. "So, somewhere in this ship, inside the data bank, is ... you? Skipper?"

"Yes."

boring."

"Skipper. Is that a T'chlen name?"
"No, Vinnie. T'chlen have no names.
T'chlen need no names. T'chlen are

One thing was nagging her still. "But you can operate this ship completely. You've got Scooter and the maintainance bots to keep things running, to be your extensions. Why do you need a copilot?"

"Because I'm lonely."

Scooter had delivered her baggage

from the San Remo, and Skipper had settled the bill. Vinnie was annoyed on both accounts until she remembered what her status had been in Il Marsupiale. She was getting out. Sooner or later she would get home. She'd signed a one-year contract with Skipper, but contracts could be broken.

The merchant officer uniforms in her cabin did not fit. That could be taken care of later. She put on a white silk blouse and her navy uniform breeches. I do look good, she thought. And I'm lonely, too. But nothing I could cure on Canjuro. There will be other worlds. Other men. The speaker chimed.

"Vinnie?"

"Yes, Skipper."

"Scooter informs me that the pilgrims are aboard. Would you be so good as to go aft and greet them? Make sure they're settled in."

"Certainly. Uh, what sort of religion?" It was best to ask. Some sects would not take kindly to an attractive woman in a low-cut blouse. Some would take too kindly.

"According to Scooter, they call themselves Finneganists."

"Finneganists?"

"That's correct. I've consulted my records and can find no reference. Perhaps they're a new sect."

Vinnie buckled a vest over her blouse. Better safe than sorry. "Well, I'll see what I can find out."

In the galley she encountered

Scooter moving forward. He seemed to be less than delighted to see her.

O be less than delighted to see her.
"I got the job," she said needlessly.

"I know. I collected your baggage."
"What are the passengers like?"

"Charming," Scooter grumped, and hurried off. That needs work, she

hurried off. That needs work, she thought, and opened the door to the pilgrims' quarters. The place was full of Gloots.

The nearest raised a gleaming silver hammer, intending to strike, but was restrained by a larger fellow. Sixteen pairs of red eyes regarded her coldly. She attempted to smile.

"I'm Lavinia Jones, your ...." And something told her not to say executive officer. "Your pilot. The jump to Ebeneezer will take four standard days, two of them at light speed. If there's anything you require, either Scooter, the steward, or I will do our best to attend to your needs."

The Gloots glanced at each other, then bowed.

"Which one of you is the leader?"

The tallest one, the one that had restrained the hammer-wielder, bowed again. His scaled coating had begun to silver about the mouth and eyes. When he attempted a smile, his beak clacked alarmingly.

"I ham Pishop Ch'ccc'uu'chass, Keeper uf the Sssacred Hod an' Punch, an' ssshepherd uf my flock."

Ch-Ch-ooo-who? "It's an honor, Your Eminence. We'll be lifting in fifteen minutes. This entire section serves as a static tank, so please do not leave this area until we're out of the planetary field. The galley has been programmed to serve you, and dinner will be at 1800, ship time."

The Gloots again bowed.

"Huntil then, Captain."

Vinnie closed the door, cutting off a loud burst of Gloot clacking (she'd always considered that Glootspeech sounded like a roomful of Ping-Pong balls and mousetraps, all going at once), and hurried forward. She checked the ready board and snapped herself in.

"Vinnie."

"Yes, Skipper."

"I noticed that you let them call you Captain."

"Yes, I know. No offense, but I thought it might be best I don't know why, an intuition perhaps. Do they know about you?"

"Not to my knowledge. Intuition fascinates me. It is not a T'chlen characteristic. You did correctly, Vinnie. What are your feelings on the pilgrims?"

Vinnie cleared her throat sharply. "They're Gloots!"

"So?"

"They are, without question, the most obnoxious known sapient race in the galaxy."

"Vinnie," Skipper said patiently. "That is exactly the first reaction the Vardanians had to humans after they discovered you."

"I thought we discovered them."

"That's as may be. I admit to a

slight Vardanian bias."

"And I admit to finding the Gloots to be rude. One of them tried to brain me with a hammer."

"Hod."

"Beg pardon?"

Lights rippled across the panel as Skipper ran his preflight checks. He explained as he readied the ship. "That object is the *bod* that Bishop Unpronounceable Name referred to. The *punch* is spirituous liquor. They brought several casks aboard. And I think I've run down a line on their religion."

The impulse engines began to cycle.

"It is a religion?"

"No. I found, by cross-checking references to the words Finnegan, bod, and punch, that they all occur in an Irish folk song called 'Finnegan's Wake,' which is also the name of a famous piece of Irish literature. This is a human reference, you understand." Vinnie nodded. "In the song, Tim Finnegan, a drunken laborer of the type known as a bod carrier hence the hod - falls from a ladder and cracks his skull. His people spirit him home for a wake, which is a memorial party held in the presence of the corpse. At this party, much liquor is consumed and a fight breaks out. Someone throws a bottle of whiskey, which breaks, spilling over the corpse of Tim Finnegan. Finnegan is not dead, merely concussed. The liquor revives him and he rises, exclaiming angrily on the waste of good whiskey. That, essentially, is it."

"And they based a religion on that?"

"Resurrection is a powerful folk myth, Vinnie," Skipper replied. The ready lights were all lit. "It has influenced many religions on many worlds. It is my belief that these Gloots discovered the song in some obscure archive and worship the memory of Saint Finnegan, who, with the aid of alcohol — which Gloots are quite fond of — rose from the dead."

"That's the weirdest thing I've ever heard."

"Perhaps," Skipper mused. "Let me know if you come up with a better extrapolation. We are cleared for departure. Take her out, pilot."

Vinnie did not fall asleep under stasis. She had too much on her mind. A lonely self-operating ship who was now her employer. A self-important robot steward. And a hold full of Gloots.

Ebeneezer was a catchall religious world with hundreds of temples, shrines, mausoleums, cathedrals, catafalques, mosques, synagogues, sacred spots, and holy places. It was quite conceivable that there was a holy distillery there, sacred to the Finneganists, and that Biship Unpronounceable Name and his green, glaring flock were just simple pilgrims — but she wasn't counting on it. Skipper

was not yet convinced of the Gloot malevolence, and Scooter was hostile to her, so she'd have to keep on eye on them herself.

The field cut off and she checked the board. Everything was in order. Now they would cruise for twenty hours before cutting in the light drive.

"Vinnie?"

"Yes, Skipper. How'd I do?"

"Fine. You rode the controls a bit hard, but I know that it's difficult to pilot under a static field. There is one thing ..."

"Yes?"

"My pickups have been manually switched off in the passenger section. It seems that our pilgrims wish privacy. Ordinarily I would not deny them this right, but, under the circumstances, I think an override might be in order. There is a manual override circuit in the galley above the bulk synthesizer. It will switch on the pickups without showing a light."

"Right," Vinnie replied, swinging out of her couch. If those little bleeders were going to start making trouble this early, it was going to be a long voyage.

She made her way to the galley, noting that Scooter was nowhere about, but before she could reach the panel, something round and hard was pressed into the small of her back.

"Pleasse, not to moof." She froze, her eyes darting to the nearest pick-up. It, too, had been switched off. "Get down hon your hansss an' knesss

an' bend forward, hor I will kill you."
She did as she was told.

"Why?"

"Harder to hit you hup there," came the reply as something heavy smashed into the back of her head.

Her hands and feet were tied. She was stretched on the bed of a cubicle that she supposed was in the passenger section, as it had a different look than her own quarters. Scooter stood on the deck near the bed, looking darkly inert. The cabin pickup had been switched off. After a few moments of fumbling around with her nose, she managed to activate the terminal.

"Vinnie?"

"Shhh. They might hear you."

Skipper's volume softened. "Is that better?"

"Yeah. Now, can you turn off this light?"

"I'm afraid not. It's keyed to the pickup circuit."

"Can you burn it out?"

"Let me check." A few seconds later, the light flared and died.

"That's got it. With any luck they won't know that it's on. What's happening?"

"They've taken over the cockpit," Skipper said angrily. "Most of my pickups are still on. I don't think they know about me, though."

"That gives us a big advantage. Surprise. Now all you have to do is flood the ship with knockout gas and take us back to Canjuro .... "

"Vinnie, I have no knockout gas."

"Sart!" She shook her head angrily. "I keep forgetting that this isn't a destroyer. What could you do to them?"

"Nothing that wouldn't hurt you worse, I'm afraid," Skipper replied mournfully. "And I can't risk their hurting you."

"What are they up to?"

"They've set a course for Pipistrello, the closest planet in. Pirates, I'd guess. I've sent a distress call, but I think your destroyer's already left the system."

"They'll hear it on Canjuro ...."

"And broadcast it along the beacon chain to the lightspace transmitter on Alcione. They'll contact the naval base on Loosestrife and there'll be a warship here in two days."

"No good."

"No good. I may still be functioning, but they'll probably kill you."

"Shut down the drives."

"That could also endanger you. The old boy, the phony bishop, has been snooping around in the data bank. It won't take him long to figure out that I'm here. Then he'll make me cooperate by torturing you ...." Skipper broke off sheepishly. "At least, that's what I'd do in his place."

There was an embarrassed silence.

"If only they could be made ...."

"What?"

"Someone's coming."

The door swung open. Two Gloots stood glaring at her. "You will come wisss usss."

"How? Fly?"

They hustled in and manhandled her off the bed. For little guys, they were strong. She was brought to rest in the galley, stretched out on the dining table. I don't like this, she thought, but a light on the wall told her that Skipper's pickup was open. Get them talking.

"You're nothing but a bunch of phonies ..." she cried angrily. The bishop glared at her.

"Phonesss? How phonesss?"

"You're not followers of Saint Finnegan. Tim Finnegan was a gentleman"

"We are hisss followerss. Finnegan will protect usss," the parrotbeak snapped angrily.

"Finnegan would never have treated a woman this way."

The bishop was taken aback. "There hisss nothing hin the sssacred textsss to hindicate thisss. Finnegan rosse from the dead."

"He was Irish. A gentle people."

"Killersss. Barbariansss. Famousss terrorisss. A sssavage people."

"I'm Irish."

That stopped them. They fell back and caucused, glancing at her from time to time. Finally, led by the bishop, they returned.

"Joness hisss han Irishhh name?"
"My mother was a Shaughnessy."

They drew back. "Irishhh. A sssav-

age," they murmured.

This wasn't working. She had to come up with the right answer, and fast. Keep them talking. "What are you going to do with me?"

The bishop smiled evilly. "Kill you. Hif Tim Finnegan hisss wisss you, you will risse from the dead."

You nasty little bugger. Sart! There was one last chance, if Skipper was quick enough. She glanced at the pickup light. The Gloots crowded in around her, the hod carrier in front, silver shaft upraised.

"I call on Tim Finnegan to protect me," Vinnie cried. "Protect me from these, your followers."

"Kill her," the bishop snarled. "Stop!"

Everyone froze.

"What are ya doin' ta that lass?" The Gloots stared at the speaker, openmouthed. Vinnie's heart started again.

"Tim."

"Ay, lass. Ye ugly leprechauns. Ye take me name in vain. I dinna countenance ye hurtin' anyone, let alone a sweet daughter of the old sod."

The Gloots, terror-stricken, began falling to their knees.

"Hit'sss a lie," the bishop screamed. "The computer hisss doing hit."

"No," one of the Gloots pleaded. "Isss sssimple navcomputer. Could not do that."

"Hit'sss a lie," the bishop repeated. He stabbed out savagely, cutting

off the intercom, but Skipper's voice racketed through the ship.

"I am Tim Finnegan!"

The Gloots reeled. "No!" the bishop raged, drawing a knife from his belt, advancing on Vinnie.

"Isss a fake. You will die! Uhhh!"
The bishop froze, his arm poised to
strike. Then the knife clattered to the
deck, and the bishop, after a pause,
followed it. The Gloot lowered his
hod.

"Tim Finnegan ssaysss. We obey."

Vinnie watched the *Talavera* match speeds with the pinnace. The Gloots were locked up in the hold, awaiting the destroyer's boarding party.

"Skipper, I didn't know that you could do a brogue."

"I didn't either, but I had been playing over those Irish songs after I had discovered the origins of the Finneganists and I guess I'm a quick study. I'm just happy that I was in time." He paused. "You know, Vinnie, I think we make a good team."

She smiled. "I was thinking the same thing. It's too bad we lost the commission, though."

"Vinnie," Skipper chuckled. "I *al-ways* get the money in advance. We've been paid."

"Then we're ahead."

"We're ahead. Oh, don't forget to go down and reactivate Scooter after we've settled the Gloots." "I won't." Scooter wasn't going to enjoy that. She looked out of the cockpit. A launch was shoving off from *Talavera*. "Well, I'd better go down and meet the navy. It'll be interesting explaining this to Moody."

"Moody?"

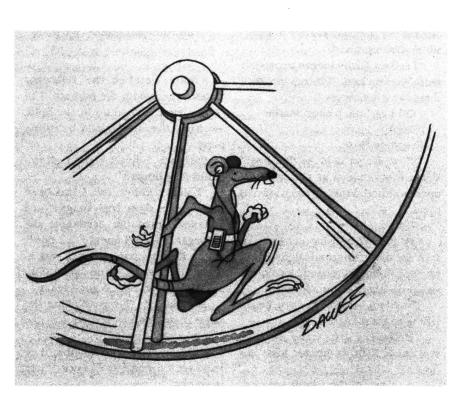
"My old chief. He'll be leading the

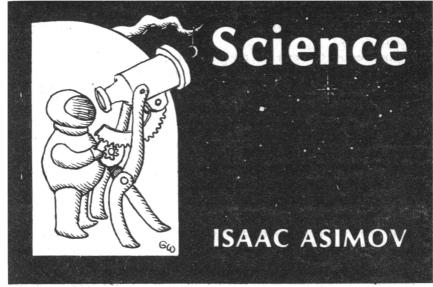
boarding crew. He's bound to give me a hard time."

Skipper laughed. "No, he won't." "Why?"

"You outrank him now."

Vinnie grinned. She was going to like this job.





Drawing by Gahan Wilson

#### MADE, NOT FOUND

I received an advertisement from a writer's magazine some time ago. They actually wanted me to subscribe.

Actually, that's a lost cause for them because I don't subscribe to writer's magazines, nor do I read books on how to write, nor do I take courses in the subject. The few times I have accidently collided with such things, I have quickly learned that there are many thing I do, and don't do, that are *wrong*, and that gets me nervous. Obviously, if I find out too much about what I do wrong, I will become unable to write and sell, and that would be a fate far worse than death.

So I glanced at the advertisement with lack-lustre eye — and was riveted at once by the fact that they had personalized it, typing in my personal name in an appropriate empty space. Here is what it said:

"Imagine how great these words would look in the pages of a national magazine or on the cover of a nationwide bestseller? — BY ISAAC ASIMOV."

I was astonished. I don't have to imagine it. I've seen it.

The advertisement went on talking to me personally: "There's noth-

Science

ing like seeing your name in print, or the extra income that manuscript sales can bring ... Today you have four good reasons to give freelancing ... another try."

Another try? I haven't quit the first try yet.

Clearly, the computer had not been programmed to omit established writers from its list. Or else I've got such a funny Russian name that the computer just couldn't believe I was really a writer.

Such a thing is not impossible. The Russian chemist Dmitri Ivanovich Mendeleev (1834-1907), who made what may well be the most important chemical advance of the 19th Century, was turned down for a Nobel Prize in 1906 largely because he had a funny Russian name, instead of a sensible sounding one in German, French or English.

So let's start off with Mendeleev -

In 1869, Mendeleev worked out the periodic table of the elements (see BRIDGING THE GAPS, F&SF, March 1970). In this table, he arranged the elements in order of atomic weights and did it in ranks and files in such a way that elements with similar chemical properties fell into the same row.

In order to make the arrangement work, Mendeleev was forced to leave gaps here and there, gaps which he daringly maintained would be filled by as-yet-undiscovered elements.

Thus, he left gaps underneath the elements aluminum, boron, and silicon and called the elements that (he said) would eventually fill those gaps: "eka-aluminum," "eka-boron," and "eka-silicon." The word "eka" is Sanskrit for one, so that the missing elements were "one below" aluminum, boron, and silicon respectively.

Mendeleev turned out to be completely right. In 1875, eka-aluminum was discovered and named "gallium"; in 1879, eka-boron was discovered and named "scandium"; and in 1885, eka-silicon was discovered and named "germanium." In each case, the properties of the new elements were precisely those predieted by Mendeleev from the regularities revealed by the periodic table.

A couple of the gaps pointed out by Mendeleev, however, were not filled in his lifetime. There were, for instance, two gaps below the element manganese. The one just below it was "eka-manganese," and the one below that was "dvi-manganese," the "dvi" being the Sanskrit word for two, and these remained unfilled.

In 1914, seven years after the death of Mendeleev, the English physi-

cist Henry Gwyn-Jeffreys Moseley (1887-1915) rationalized the periodic table in terms of the new theories of atomic structure (see THE NOBEL PRIZE THAT WASN'T, F&SF, April 1970). Moseley made it possible to give each element a unique "atomic number." It became obvious that if two elements had consecutive atomic numbers, then there could be no undiscovered element lying between them. Furthermore, if there was a gap in the list of atomic numbers, there had to be an undiscoverd element to fill that gap.

The gaps represented by eka-manganese and dvi-manganese were still unfilled in Moseley's times, but now they had atomic numbers. Eka-manganese was element #43, and dvi-manganese was element #75, and from here on in they will be referred to by those numbers.

By Moseley's time, radioactivity had been discovered, and it seemed that all elements with atomic numbers of 84 or higher were radioactive. Elements with atomic numbers of 83 or less, however, seemed to be stable.

Suppose we ignore the radioactive elements, therefore, and confine ourselves to elements with atomic numbers of 83 or less. And suppose, further, that we refine what we mean when we talk of a "stable" element.

In 1913, the English chemist Frederick Soddy (1877-1956), demonstrated that elements could exist in a number of varieties which he called "isotopes." All the isotopes of a particular element fitted into the same place in the periodic table, and "isotope" is, in fact, from the Greek words meaning "same place."

It was eventually shown that every element, without exception, possessed a number of isotopes, sometimes as many as two dozen. The isotopes of a given element differ among themselves in their nuclear structure. All the isotopes of a given element contain the same number of protons in the nucleus (a number equal to the atomic number) but have different numbers of neutrons.

As it happens, all known elements with atomic numbers of 84 and over have no stable isotopes. Every known isotope of all those elements are radioactive, some more intensely than others. Only three isotopes of atomic numbers of 84 or over are radioactive to so small an extent that an appreciable fraction of their atoms can remain unchanged over eons of time. These are uranium-238, uranium-235, and thorium-232.

The numbers attached to the isotope names represent the total number of protons and neutrons in the nucleus. Thus, uranium has an atomic number of 92, so that uranium-238 had 92 protons in the nucleus and 146 neutrons, for a total of 238. Uranium-235 had 92 protons in the nucleus and 143 neutrons. Thorium has an atomic number of 90, so thorium-232 has 90 protons in the nucleus and 142 neutrons.

And for the elements with atomic numbers of 83 or less, all those known in the time of Moseley and Soddy had one or more isotopes that were stable, and that could exist for indefinite periods without charge. Tin has ten such stable isotopes: tin-112, tin-114, tin-115, tin-116, tin-117, tin-118, tin-119, tin-120, tin-122, and tin-124. Gold has only one: gold-197.

By and large, only stable isotopes exist in nature, together with a few radioactive isotopes where the radioactivity is very feeble. Most of the radioactive isotopes exist only because small quantities are formed in the laboratories through nuclear reactions.

Well, then, when Mosely worked out the scheme of atomic numbers, there remained exactly four elements with atomic numbers of 83 or less that had not yet been discovered. They were elements \*43, \*61, \*72, and \*75. Chemists were confident that all four would be discovered in time and that all four were stable or (as would eventually be said) that all four had at least one stable isotope.

Element \*72 lies directly under zirconium in the periodic table so that it might be called "eka-zirconium" by Mendeleev's system. As a matter of fact (as is now known), element \*72 very closely resembles zirconium in all its chemical properties. The two elements are more nearly twins than any other two elements in the periodic table.

This means that whenever zirconium is separated from other elements, advantage being taken of the way in which its chemical properties differ from those of other elements, element \*72, with its properties matching those of zirconium always separates out with it. Every sample of zirconium dealt with, prior to 1923, was always about 3 percent element \*72, but chemists didn't realize that.

Two scientists, the Dutch physicist Dirk Coster (1889-1950) and the Hungarian chemist Gyorgy Hevesy (1885-1966), working in Copenhagen, made use of X-ray bombardment, which, as Moseley had showed, gave results that depended upon the atomic number of the element and not upon its chemical properties. If hafnium were present in zirconium ores, it ought to react to X-ray bombardment differently from zirconium no matter how twin-like the two elements were, chemically. Finally, in January 1923, Coster and Hevesy detected element \*72's presence in

zirconium and eventually isolated \*72 in quantities sufficient to study its properties.

Coster and Hevesy named element \*72 "hafnium," from the Latinized named of Copenhagen, where the element was found. Hafnium, as was eventually discovered, possessed six stable isotopes: hafnium-174, hafnium-176, hafnium-177, hafnium-178, hafnium-179, and hafnium-180.

Meanwhile, three German chemists were working on elements #43 and #75 (eka-and dvi-manganese). The chemists were Walter Karl Friedrich Noddack (1893-1960), Ida Eva Tacke (1896), who eventually married Noddack, and Otto Berg. They could estimate the chemical properties of these two undiscovered elements from their relationship to manganese, and they closely investigated those minerals that they felt might possess quantities of the two elements.

Finally, in June 1925, they had sufficiently clear evidence of the presence of element \*75 in a mineral called gadolinite. The next year they manged to isolate a gram of the newly discovered element and determined its chemical properties. They named it "rhenium" from the Latin name of the Rhine river in western Germany.

Rhenium, as was eventually found out, had two stable isotopes: rhenium-185 and rhenium-187.

Whereas hafnium is not a particularly rare element, being considerably more common than tin, arsenic or tungsten, and being difficult to isolate only because of its great similarity to zirconium; rhenium, on the other hand, is one of the rarest of the elements. It is only about a fifth as common as gold or platinum, so it is no wonder it was so hard to detect.

At the time they announced the discovery of rhenium, Noddack, Tacke, and Berg also announced the discovery of element #43, and named ti "masurium," after a region in East Prussia that was then part of Germany and is now part of Poland.

Here, however, the three chemists were misled by their own eagerness. Other chemists could not confirm their work, and "masurium" faded out of the chemical consciousness. The announcement was premature and element \*43 remained undiscovered.

As late as 1936, then, there still remained two gaps among the elements of atomic number 83 or less; these were elements \*43 and \*61. There were 81 elements known with one or more stable isotopes and, apparently, there were two to go.

Science

Working on the problem, after the announcement of masurium had proved mistaken, was an Italian physicist, Emilio Segre (1905- ). All attempts to isolate the element #43 from likely minerals, however, failed. Fortunately, though, Segre had the special advantage of having worked with the Italian physicist Enrico Fermi (1901-1954).

Fermi had grown interested in the neutron, which had first been discovered by the English physicist James Chadwick (1891-1974) in 1932. Till then, atoms had been frequently bombarded with alpha particles, which were positively charged, and which were repelled by the positively charged atomic nuclei. This increased the difficulty of carrying through nuclear reactions.

Neutrons, however, had no electric charge (hence their name) and would not be repelled by atomic nuclei. Collisions took place more easily and frequently as a result, than would have been the case with alpha particles. Fermi discovered that neutrons were even more effective if they were made to pass through water or paraffin first. Under these conditions, neutrons (which usually travel at high speeds under the conditions of their initial liberation) collide with atomic nuclei of hydrogen, oxygen, or carbon, bouncing away without interaction. In the process, they give up some of their energy and, by the time they have passed through the water or paraffin, they have slowed down considerably. Such slow neutrons strike nuclei with less force and therefore have a smaller chance of bouncing off, and a greater chance of penetrating the nucleus.

When such a slow neutron enters an atomic nucleus, that nucleus frequently gives off a beta particle (which is actually a speeding electron). The nucleus loses the negative charge of the electron, which is the same as saying it gains a positive charge. *That* is the equivalent of saying that one of the neutrons in the nucleus is converted to a proton. Since the nucleus has now gained a proton, its atomic number becomes one higher than it was before.

Fermi carried through a number of neutron bombardments that converted an element to another that was one higher in atomic number, and, in 1934, it occurred to him to bombard uranium with neutrons. Uranium had the highest atomic number (92) of any known element, and Fermi thought that neutron bombardment of uranium might form element \*93, which was one that was (as far as was then known) unknown in nature (see NEUTRALITY! F&SF, January 1980). Fermi even thought he had succeeded, but the results were too complex to make

that thought certain, and they led to something even more exciting (and ominous) than the creation of a new element would have been.

Segre, thinking of Fermi's work, realized that it was not necessary to go off the end of the periodic table to create a new element. If chemists couldn't find element \*43, why not look for it by bombarding molybdenum (atomic number \*42) with neutrons, and perhaps forming element \*43. It would thus be made, not found.

Segre visited the University of California and discussed the matter with the American physicist Ernest Orlando Lawrence (1901-1958). Lawrence had invented the cyclotron and could carry through the most energetic subatomic bombardments in the world (at that time). For instance, Lawrence could use his cyclotron to set up an energetic beam of "deuterons," the nuclei of hydrogen-2.

The deuteron consists of a proton and neutron in rather loose association. When a deuteron approaches an atomic nucleus, the proton can be repelled and forced away from the neutron, and that neutron could then continue onward into the nucleus.

Lawrence bombarded a sample of molybdenum for several months with deuterons until the sample was highly radioactive. He then sent the sample to Segre, who had returned to Palermo, Italy, and was now working on the problem with Carlo Perrier.

Segre and Perrier analyzed the molybdenum sample and found they could isolate molybdenum, niobium, and zirconium from it and that none of these isolated elements were radioactive. However, if they added manganese or rhenium to the sample, and then separated those substances out of the sample again, the radioactivity came out with them. This seemed to mean that the radioactivity was associated with traces of manganese or rhenium that were already in the molybdenum, or with some element that was so like manganese or rhenium in chemical properties as to come out with those elements.

If it were the latter case, then the element in question was very likely to be element #43, which lay between manganese and rhenium in the periodic table. What's more, if it were element #43, it was separated out more effectively with rhenium than with manganese, which meant its properties were closer to rhenium than to manganese, and that was to be expected of element #43.

Segre and Perrier tried to determine the properties of the new element, as best they could, by following the radioactivity as they treated their solutions in different ways. It was very difficult to do so, for they

calculated they had only about a ten-billionth of a gram of element #43 as a result of deuteron bombardment of molybdenum.

In 1940, however, Segre discovered that among the products of the newly discovered process of uranium fission (stemming from the work of Fermi on the neutron bombardment of the element) was element \*43. Much larger quantities could be obtained from the fission products than from bombarded molybdenum. The properties of element \*43 could then be determined with considerable precision.

I might mention that I am pretty proud of myself in this connection. I wrote a story called "Super-Neutron" in February 1941, and I managed to be right up to date. In the story, which appeared in the September 1941 Astonishing Stories, I had a character talk about primitive methods for obtaining energy. He said, "I believe that they used the classical uranium fission method for power. They bombarded uranium with slow neutrons and split it up into masurium, barium, gamma rays, and more neutrons, thus establishing a cyclic process."

Right on! We science fiction writers knew about it even though the government tried to clamp a lid on the whole thing.

Notice that I call element \*72, "masurium" in the story. It was the only name available, even though it wasn't legal, since Noddack, Tacke and Berg had not truly isolated it. But then, in 1947, the German-British chemist Friedrich Adolf Paneth (1887-1958) maintained that an artificially produced element was identical in all ways with a naturally occurring one, so that the discovery of the first was equivalent to the discovery of the second.

Segre and Perrier accepted this and promptly made use of the discoverers' right of naming the discovery. They named element #43 "technetium" from the Greek word "technetos," meaning "artificial."

Technetium was the first element to be artificially produced in the laboratory, but not the last. Sixteen more have been so produced, but technetium, of all of these, is the lowest in atomic number. Nor does it seem possible that any element of lower atomic number will ever be artificially produced. It follows that technetium is the first artificial element, both in time, and in position in the periodic table.

A study of the properties of technetium at once uncovered something unexpected. Although sixteen isotopes of technetium have been produced in the laboratory, not one of them — not one — is stable. All are radioactive. Nor is it conceivable in view of what is now known that any stable isotope can be discovered in the future. Technetium, then, is the

element of lowest atomic number to lack a stable isotope; it was the simplest radioactive element.

To be sure, some of the technetium isotopes are less intensely radioactive than others. The intensity of radioactivity is measured by the "half-life," which is the time it takes for half of any quantity of a substance to undergo radioactive breakdown. Technetium-92, for instance, has a half-life of 4.4 minutes, and technetium-102 has one of only 5 seconds. If the whole earth consisted of technetium-102, it would break down to a single surviving atom in less than fifteen minutes.

Technetium-99, however, has a half-life of 212,000 years; technetium-98 one of 4,200,000 years, and technetium-97, one of 2,600,000 years. In human terms these are long half-lives, and if a sample of any of these were to be manufactured, very little of that sample would break down in the course of a human lifetime.

In geological terms, however, such half-lives are but trifles. Suppose that when the Earth formed, 4.6 billion years ago, it consisted of nothing but one of these long-lived technetium isotopes. If that were so, then the planetary supply of technetium-99 would have been reduced to a single atom after 35,000,000 years; technetium-98 would have been reducted to a single atom after 700,000,000 years, and technetium-97 would have been reduced to a single atom after 430,000,000 years. No conceivable amount of technetium could have survived three-fourths of a billion years, which is only 15 percent of the total existence of our planet at this time.

Any technetium that exists today in nature would only exist because of having been formed recently by the *natural* fission of uranium. The quantity so formed is excessively tiny, and it is no wonder that no chemist was ever able to locate it in any mineral, or that that announcement of Noddack, Tacke and Berg that they had done so was in error.

Of course, when we speak of something as existing, or not existing, in nature, we are usually speaking of Earth. Earth represents a vanishingly small fraction of all of nature.

In 1952, the American astronomer Paul Willard Merrill (1887-1961) detected spectral lines in certain cool red-dwarf stars that he identified with technetium. This has been confirmed many times over, and it has been discovered that technetium is present in some cool stars to an amount 1/17,000th that of iron, which is a remarkably high concentration.

Clearly, technetium could not have been formed in such cool stars at

Science

their births and have persisted since. The half-lives of radioactive isotopes is, if anything, shortened at the temperature of the interiors of even cool stars. The technetium detected in stars, therefore, must be formed in processes that are continuing now. By trying to work out exactly what nuclear changes must exist in order to form technetium in the amounts detected, it may be that we will learn something useful about nuclear reactions in other stars. It may help us understand even our own Sun a bit better.

That still leaves one element in the supposedly stable range of atomic numbers to be discussed. That is element #61, the last remaining gap in that stable range. It is one of the rare earth elements (see THE MULTIPLYING ELEMENTS, F&SF, February 1970).

No one had ever detected element \*61 in nature, although in 1926, two groups of chemists, one American and one Italian, claimed to have detected it. The former named it "illinium" (after the state of Illinois) and the latter "florentium" (after the city of Florence), both honoring the place of discovery. Both, however, proved to be mistaken.

In the 1930's, an American group bombarded neodymium (atomic number \*60) with a cyclotron-produced beam of deuterons, hoping to form element \*61. They probably did produce tiny traces of it, but not enough to supply definite evidence of its existence. Even so, the name "cyclonium" was suggested.

Finally, in 1945, three Americans, J. A. Marinsky, L. E. Glendenin, and C. D. Coryell, located sufficient quantities of element \*61 in the fission products of uranium to study and elucidate its properties. They named it "promethium," after the Greek god, Prometheus, who snatched fire from the Sun for humanity, just as promethium had been snatched from the nuclear fire of fissioning uranium.

Fourteen isotopes of promethium are known and, as in the case of technetium, not a single one of these isotopes is stable. This means that there are only 81 elements altogether that are known to possess one or more stable isotopes, and that Noddack, Tacke and Berg had the honor of being the very last to discover a stable element (rhenium).

Promethium is far more unstable than technetium. The longest-lived promethium isotope is promethium-145, the half-life of which is no more than 17.7 years.

Yet even 17.7 years is respectable. Two other gaps existed, in the radioactive range of elements beyond atomic number 83, that were not

filled till after the discovery of technetium. These were elements #85 and #87. There were claims in the 1930's that they had been detected, and they were named "alabamine" and "virginium" respectively, but these claims were mistaken.

In 1940, element #85 was formed by the bombardment of bismuth (element #83) with alpha particles, and, in 1939, traces of element #87 were found among the breakdown particles of uranium-235. Eventually, element #85 was named "astatine" (from a Greek word meaning "unstable"), and element #87 was named "francium" (for France, the native land of the discoverer).

Astatine was unstable indeed, for its most long-lived isotope is astantine-210, which has a half-life of only 8.3 hours. Francium is more unstable still, for its most long-lived isotope is francium-223, with a half-life of but 22 minutes.

Even the elements beyond uranium, which have been formed in the laboratory since 1940, are, for the most part, less unstable than francium. Only the elements beyond atomic number 102, of which only a few isotopes are as yet known, have none with a longer half-life than francium-223.



Lucius Shepard is an outstanding new writer who has, to date, given readers of F&SF three fine and very different stories: ("Solitario's Eyes," September 1983, "Salvador," April 1984, and "The Night of White Bhairab," October 1984). Here he presents us with yet another. "The Man Who Painted the Dragon Griaule" is a superbly-crafted tale of a man's life-long work and how that work shaped the man and defined his life.

# The Man Who Painted the Dragon Griaule

#### BY LUCIUS SHEPARD

"... Other than the Sichi Collection, Cattanay's only surviving works are to be found in the Municipal Gallery at Regensburg, a group of eight oils-on-canvas, most notable among them being Woman With Oranges. These paintings constitute his portion of a student exhibition hung some weeks after he had left the city of his birth and traveled south to Teocinte, there to present his proposal to the city fathers; it is unlikely he ever learned of the disposition of his work, and even more unlikely that he was aware of the general critical indifference with which it was received. Perhaps the most interesting of the group to modern scholars, the most indicative as to Cattanay's later preoccupations, is the Self Portrait, painted at the age of twenty-eight, a year before his departure.

"The majority of the canvas is a richly varnished black in which the vague shapes of floorboards are pre-

sented, barely visible. Two irregular slashes of gold cross the blackness, and within these we can see a section of the artist's thin features and the shoulder panel of his shirt. The perspective given is that we are looking down at the artist, perhaps through a tear in the roof, and that he is looking up at us, squinting into the light, his mouth distorted by a grimace born of intense concentration. On first viewing the painting, I was struck by the atmosphere of tension that radiated from it. It seemed I was spying upon a man imprisoned within a shadow having two golden bars, tormented by the possibilities of light beyond the walls. And though this may be the reaction of the art historian, not the less knowledgeable and therefore more trustworthy response of the gallery-goer, it also seemed that this imprisonment was self-imposed, that he could have easily escaped his confine; but that he had realized a feeling of stricture was an essential fuel to his ambition, and so had chained himself

to this arduous and thoroughly unreasonable chore of perception..."

from Meric Cattany:
 The Politics of Conception
 by Reade Holland, Ph.D

1.

n 1853, in a country far to the south, in a world separated from this one by the thinnest margin of possibility, a dragon named Griaule dominated the region of the Carbonales Valley, a fertile area centering upon the town of Teocinte and renowned for its production of silver, mahogany, and indigo. There were other dragons in those days, most dwelling on the rocky islands west of Patagonia tiny, irascible creatures, the largest of them no bigger than a swallow. But Griaule was one of the great Beasts who had ruled an age. Over the centuries he had grown to stand 750 feet high at the midback, and from the tip of his tail to his nose he was 6,000 feet long. (It should be noted here that the growth of dragons was due not to caloric intake, but to the absorption of energy derived from the passage of time.) Had it not been for a miscast spell, Griaule would have died millennia before. The wizard entrusted with the task of slaving him - knowing his own life would be forfeited as a result of the magical backwash — had experienced a lastsecond twinge of fear, and, diminished by this ounce of courage, the spell had flown a mortal inch awry. Though the wizard's whereabouts were unknown, Griaule had remained alive. His heart had stopped, his breath stilled, but his mind continued to seethe, to send forth the gloomy vibrations that enslaved all who stayed for long within range of his influence.

This dominance of Griaule's was an elusive thing. The people of the valley attributed their dour character to years of living under his mental shadow, yet there were other regional populations who maintained a harsh face to the world and had no dragon on which to blame the condition: they also attributed their frequent raids against the neighboring states to Griaule's effect, claiming to be a peaceful folk at heart — but again, was this not human nature? Perhaps the most certifiable proof of Griaule's primacy was the fact that despite a standing offer of a fortune in silver to anyone who could kill him, no one had succeeded. Hundreds of plans had been put forward, and all had failed, either through inanition or impracticality. The archives of Teocinte were filled with schematics for enormous steam-powered swords and other such improbable devices, and the architects of these plans had every one stayed too long in the valley and become part of the disgruntled populace. And so they went on with their lives, coming and going, always returning, bound to the valley, until one spring day in 1853, Meric Cattanay arrived and proposed that the dragon be painted.

He was a lanky young man with a shock of black hair and a pinched look to his cheeks; he affected the loose trousers and shirt of a peasant. and waved his arms to make a point. His eyes grew wide when listening, as if his brain were bursting with illumination, and at times he talked incoherently about "the conceptual statement of death by art." And though the city fathers could not be sure, though they allowed for the possibility that he simply had an unfortunate manner, it seemed he was mocking them. All in all, he was not the sort they were inclined to trust. But, because he had come armed with such a wealth of diagrams and charts, they were forced to give him serious consideration.

"I don't believe Griaule will be able to perceive the menace in a process as subtle as art," Meric told them. "We'll proceed as if we were going to illustrate him, grace his side with a work of true vision, and all the while we'll be poisoning him with the paint."

The city fathers voiced their incredulity, and Meric waited impatiently until they quieted. He did not enjoy dealing with these worthies. Seated at their long table, sour-faced, a huge smudge of soot on the wall above their heads like an ugly thought they were sharing, they reminded him of the Wine Merchants Association in

Regensburg, the time they had rejected his group portrait.

"Paint can be deadly stuff," he said after their muttering had died down. "Take vert Veronese, for example. It's derived from oxide of chrome and barium. Just a whiff would make you keel over. But we have to go about it seriously, create a real piece of art. If we just slap paint on his side, he might see through us."

The first step in the process, he told them, would be to build a tower of scaffolding, complete with hoists and ladders, that would brace against the supraocular plates above the dragon's eye; this would provide a direct route to a seven-hundred-foot-square loading platform and base station behind the eve. He estimated it would take eighty-one thousand board feet of lumber, and a crew of ninety men should be able to finish construction within five months. Ground crews accompanied by chemists and geologists would search out limestone deposits (useful in priming the scales) and sources of pigments, whether organic or minerals such as azurite and hematite. Other teams would be set to scraping the dragon's side clean of algae, peeled skin, any decayed material, and afterward would laminate the surface with resins.

"It would be easier to bleach him with quicklime," he said. "But that way we lose the discolorations and ridges generated by growth and age, and I think what we'll paint will be defined by those shapes. Anything else would look like a damn tattoo!"

There would be storage vats and mills: edge-runner mills to separate pigments from crude ores, ball mills to powder the pigments, pug mills to mix them with oil. There would be boiling vats and calciners — fifteenfoot-high furnaces used to produce caustic lime for sealant solutions.

"We'll build most of them atop the dragon's head for purposes of access," he said. "On the frontoparital plate." He checked some figures. "By my reckoning, the plate's about 350 feet wide. Does that sound accurate?"

Most of the city fathers were stunned by the prospect, but one managed a nod, and another asked, "How long will it take for him to die?"

"Hard to say," came the answer.
"Who knows how much poison he's capable of absorbing. It might just take a few years. But in the worst instance, within forty or fifty years, enough chemicals will have seeped through the scales to have weakened the skeleton, and he'll fall in like an old barn."

"Forty years!" exclaimed someone. "Preposterous!"

"Or fifty." Meric smiled. "That way we'll have time to finish the painting." He turned and walked to the window and stood gazing out at the white stone houses of Teocinte. This was going to be the sticky part, but if he

read them right, they would not believe in the plan if it seemed too easy. They needed to feel they were making a sacrifice, that they were nobly bound to a great labor. "If it does take forty or fifty years," he went on, "the project will drain your resources. Timber, animal life, minerals. Everything will be used up by the work. Your lives will be totally changed. But I guarantee you'll be rid of him."

The city fathers broke into an outraged babble.

"Do you really want to kill him?" cried Meric, stalking over to them and planting his fists on the table. "You've been waiting centuries for someone to come along and chop off his head or send him up in a puff of smoke. That's not going to happen! There is no easy solution. But there is a practical one, an elegant one. To use the stuff of the land he dominates to destroy him. It will not be easy, but you will be rid of him. And that's what you want, isn't it?"

They were silent, exchanging glances, and he saw that they now believed he could do what he proposed and were wondering if the cost was too high.

"I'll need five hundred ounces of silver to hire engineers and artisans," said Meric. "Think it over. I'll take a few days and go see this dragon of yours ... inspect the scales and so forth. When I return, you can give me your answer."

The city fathers grumbled and

scratched their heads, but at last they agreed to put the question before the body politic. They asked for a week in which to decide and appointed Jarcke, who was the mayoress of Hangtown, to guide Meric to Griaule.

he valley extended seventy miles from north to south, and was enclosed by jungled hills whose folded sides and spiny backs gave rise to the idea that beasts were sleeping beneath them. The valley floor was cultivated into fields of bananas and cane and melons, and where it was not cultivated, there were stands of thistle palms and berry thickets and the occasional giant fig brooding sentinel over the rest. Jarcke and Meric tethered their horses a half hour's ride from town and began to ascend a gentle incline that rose into the notch between two hills. Sweaty and short of breath, Meric stopped a third of the way up; but Jarcke kept plodding along, unaware he was no longer following. She was by nature as blunt as her name - a stump beer keg of a woman with a brown, weathered face. Though she appeared to be ten years older than Meric, she was nearly the same age. She wore a gray robe belted at the waist with a leather band that held four throwing knives, and a coil of rope was slung over her shoulder.

"How much farther?" called Meric. She turned and frowned. "You're standin' on his tail. Rest of him's around back of the hill."

A pinprick of chill bloomed in Meric's abdomen, and he stared down at the grass, expecting it to dissolve and reveal a mass of glittering scales.

"Why don't we take the horses?" he asked.

"Horses don't like it up here." She grunted with amusement. "Neither do most people, for that matter." She trudged off.

Another twenty minutes brought them to the other side of the hill high above the valley floor. The land continued to slope upward, but more gently than before. Gnarled, stunted oaks pushed up from thickets of chokecherry, and insects sizzled in the weeds. They might have been walking on a natural shelf several hundred feet across; but ahead of them, where the ground rose abruptly, a number of thick, greenish black columns broke from the earth. Leathery folds hung between them, and these were encrusted with clumps of earth and brocaded with mold. They had the look of a collapsed palisade and the ghosted feel of ancient ruins.

"Them's the wings," said Jarcke.
"Mostly they's covered, but you can catch sight of 'em off the edge, and up near Hangtown there's places where you can walk in under 'em ... but I wouldn't advise it."

"I'd like to take a look off the edge," said Meric, unable to tear his eyes away from the wings; though the surfaces of the leaves gleamed in the

strong sun, the wings seemed to absorb the light, as if their age and strangeness were proof against reflection.

Jarcke led him to a glade in which tree ferns and oaks crowded together and cast a green gloom, and where the earth sloped sharply downward. She lashed her rope to an oak and tied the other end around Meric's waist. "Give a yank when you want to stop, and another when you want to be hauled up," she said, and began paying out the rope, letting him walk backward against her pull.

Ferns tickled Meric's neck as he pushed through the brush, and the oak leaves pricked his cheeks. Suddenly he emerged into bright sunlight. On looking down, he found his feet were braced against a fold of the dragon's wing, and on looking up, he saw that the wing vanished beneath a mantle of earth and vegetation. He let Jarcke lower him a dozen feet more, yanked, and gazed off northward along the enormous swell of Griaule's side.

The swells were hexagonals thirty feet across and half that distance high; their basic color was a pale greenish gold, but some were whitish, draped with peels of dead skin, and others were overgrown by viridian moss, and the rest were scrolled with patterns of lichen and algae that resembled the characters of a serpentine alphabet. Birds had nested in the cracks, and ferns plumed from the interstices, thousands of them lifting in

the breeze. It was a great hanging garden whose scope took Meric's breath away - like looking around the curve of a fossil moon. The sense of all the centuries accreted in the scales made him dizzy, and he found he could not turn his head, but could only stare at the panorama, his soul shriveling with a comprehension of the timelessness and bulk of this creature to which he clung like a fly. He lost perspective on the scene — Griaule's side was bigger than the sky, possessing its own potent gravity, and it seemed completely reasonable that he should be able to walk out along it and suffer no fall. He started to do so, and Jarcke, mistaking the strain on the rope for signal, hauled him up, dragging him across the wing, through the dirt and ferns, and back into the glade. He lay speechless and gasping at her feet.

"Big 'un, ain't he," she said, and grinned.

After Meric had gotten his legs under him, they set off toward Hangtown; but they had not gone a hundred yards, following a trail that wound through the thickets, before Jarcke whipped out a knife and hurled it at a raccoon-sized creature that leaped out in front of them.

"Skizzer," she said, kneeling beside it and pulling the knife from its neck. "Calls 'em that 'cause they hisses when they runs. They eats snakes, but they'll go after children what ain't careful."

Meric dropped down next to her. The skizzer's body was covered with short black fur, but its head was hairless, corpse-pale, the skin wrinkled as if it had been immersed too long inwater. Its face was squinty-eyed, flatnosed, with a disproportionately large jaw that hinged open to expose a nasty set of teeth.

"They's the dragon's critters," said Jarcke. "Used to live in his bunghole." She pressed one of its paws, and claws curved like hooks slid forth. "They'd hang around the lip and drop on other critters what wandered in. And if nothin' wandered in..." She pried out the tongue with her knife — its surface was studded with jagged points like the blade of a rasp. "Then they'd lick Griaule clean for their supper."

Back in Teocinte, the dragon had seemed to Meric a simple thing, a big lizard with a tick of life left inside, the residue of a dim sensibility; but he was beginning to suspect that this tick of life was more complex than any he had encountered.

"My gram used to say," Jarcke went on, "that the old dragons could fling themselves up to the sun in a blink and travel back to their own world, and when they come back, they'd bring the skizzers and all the rest with 'em. They was immortal, she said. Only the young ones came here 'cause later on they grew too big to fly on Earth." She made a sour face. "Don't know as I believe it."

"Then you're a fool," said Meric.

Jarcke glanced up at him, her hand twitching toward her belt.

"How can you live here and *not* believe it!" he said, surprised to hear himself so fervently defending a myth. "God! This ..." He broke off, noticing the flicker of a smile on her face.

She clucked her tongue, apparently satisfied by something. "Come on," she said. "I want to be at the eye before sunset."

The peaks of Griaule's folded wings, completely overgrown by grass and shrubs and dwarfish trees, formed two spiny hills that cast a shadow over Hangtown and the narrow lake around which it sprawled. Jarcke said the lake was a stream flowing off the hill behind the dragon, and that it drained away through the membranes of his wing and down onto his shoulder. It was beautiful beneath the wing, she told him. Ferns and waterfalls. But it was reckoned an evil place. From a distance the town looked picturesque - rustic cabins, smoking chimneys. As they approached, however, the cabins resolved into dilapidated shanties with missing boards and broken windows; suds and garbage and offal floated in the shallows of the lake. Aside from a few men idling on the stoops, who squinted at Meric and nodded glumly at Jarcke, no one was about. The grass blades stirred in the breeze, spiders scuttled under the shanties, and there was an air of torpor and dissolution.

Jarcke seemed embarrassed by the town. She made no attempt at introductions, stopping only long enough to fetch another coil of rope from one of the shanties, and as they walked between the wings, down through the neck spines - a forest of greenish gold spikes burnished by the lowering sun - she explained how the townsfolk grubbed a livelihood from Griaule. Herbs gathered on his back were valued as medicine and charms. as were the peels of dead skin; the artifacts left by previous Hangtown generations were of some worth to various collectors.

"Then there's scale hunters," she said with disgust. "Henry Sichi from Port Chantay'll pay good money for pieces of scale, and though it's bad luck to do it, some'll have a go at chippin' off the loose 'uns." She walked a few paces in silence. "But there's others who've got better reasons for livin' here."

The frontal spike above Griaule's eyes was whorled at the base like a narwhal's horn and curved back toward the wings. Jarcke attached the ropes to eyebolts drilled into the spike, tied one about her waist, the other about Meric's; she cautioned him to wait, and rappelled off the side. In a moment she called for him to come down. Once again he grew dizzy as he descended; he glimpsed a clawed foot far below, mossy fangs jutting from an impossibly long jaw; and then he began to spin and bash

against the scales. Jarcke gathered him in and helped him sit on the lip of the socket.

"Damn!" she said, stamping her foot.

A three-foot-long section of the adjoining scale shifted slowly away. Peering close, Meric saw that while in texture and hue it was indistinguishable from the scale, there was a hairline division between it and the surface. Jarcke, her face twisted in disgust, continued to harry the thing until it moved out of reach.

"Call 'em flakes," she said when he asked what it was. "Some kind of insect. Got a long tube that they pokes down between the scales and sucks the blood. See there?" She pointed off to where a flock of birds were wheeling close to Griaule's side; a chip of pale gold broke loose and went tumbling down to the valley. "Birds pry 'em off, let 'em bust open, and eats the innards." She hunkered down beside him and after a moment asked, "You really think you can do it?"

"What? You mean kill the dragon?" She nodded.

"Certainly," he said, and then added, lying, "I've spent years devising the method."

"If all the paint's goin' to be atop his head, how're you goin' to get it to where the paintin's done?"

"That's no problem. We'll pipe it to wherever it's needed."

She nodded again. "You're a clever

fellow," she said; and when Meric, pleased, made as if to thank her for the compliment, she cut in and said, "Don't mean nothin' by it. Bein' clever ain't an accomplishment. It's just somethin' you come by, like bein' tall." She turned away, ending the conversation.

Meric was weary of being awestruck, but even so he could not help marveling at the eye. By his estimate it was seventy feet long and fifty feet high, and it was shuttered by an opaque membrane that was unusually clear of algae and lichen, glistening, with vague glints of color visible behind it. As the westering sun reddened and sank between two distant hills, the membrane began to quiver and then split open down the center. With the ponderous slowness of a theater curtain opening, the halves slid apart to reveal the glowing humor. Terrified by the idea that Griaule could see him, Meric sprang to his feet, but Jarcke restrained him.

"Stay still and watch," she said.

He had no choice — the eye was mesmerizing. The pupil was slit and featureless black, but the humor ... he had never seen such fiery blues and crimsons and golds. What had looked to be vague glints, odd refractions of the sunset, he now realized were photic reactions of some sort. Fairy rings of light developed deep within the eye, expanded into spoked shapes, flooded the humor, and faded — only to be replaced by another and anoth-

er. He felt the pressure of Griaule's vision, his ancient mind, pouring through him, and as if in response to this pressure, memories bubbled up in his thoughts. Particularly sharp ones. The way a bowlful of brush water had looked after freezing over during a winter's night — a delicate, fractured flower of murky vellow. An archipelago of orange peels that his girl had left strewn across the floor of the studio. Sketching atop Jokenam Hill one sunrise, the snow-capped roofs of Regensburg below pitched at all angles like broken paving stones, and silver shafts of the sun striking down through a leaden overcast. It was as if these things were being drawn forth for his inspection. Then they were washed away by what also seemed a memory, though at the same time it was wholly unfamiliar. Essentially, it was a landscape of light, and he was plunging through it, up and up. Prisms and lattices of iridescent fire bloomed around him, and everything was a roaring fall into brightness, and finally he was clear into its white furnace heart, his own heart swelling with the joy of his strength and dominion.

It was dusk before Meric realized the eye had closed. His mouth hung open, his eyes ached from straining to see, and his tongue was glued to his palate. Jarcke sat motionless, buried in shadow.

"Th..." He had to swallow to clear his throat of mucus. "This is the reason you live here, isn't it?"

"Part of the reason," she said. "I can see things comin' way up here. Things to watch out for, things to study on."

She stood and walked to the lip of the socket and spat off the edge; the valley stretched out gray and unreal behind her, the folds of the hills barely visible in the gathering dusk.

"I seen you comin'," she said.

A week later, after much exploration, much talk, they went down into Teocinte. The town was a shambles - shattered windows, slogans painted on the walls, glass and torn banners and spoiled food littering the streets - as if there had been both a celebration and a battle. Which there had. The city fathers met with Meric in the town hall and informed him that his plan had been approved. They presented him a chest containing five hundred ounces of silver and said that the entire resources of the community were at his disposal. They offered a wagon and a team to transport him and the chest to Regensburg and asked if any of the preliminary work could be begun during his absence.

Meric hefted one of the silver bars. In its cold gleam he saw the object of his desire — two, perhaps three years of freedom, of doing the work he wanted and not having to accept commissions. But all that had been confused. He glanced at Jarcke;

she was staring out the window, leaving it to him. He set the bar back in the chest and shut the lid.

"You'll have to send someone else," he said. And then, as the city fathers looked at each other askance, he laughed and laughed at how easily he had discarded all his dreams and expectations.

"...It had been eleven years since I had been to the valley, twelve since work had begun on the painting, and I was appalled by the changes that had taken place. Many of the hills were scraped brown and treeless, and there was a general dearth of wildlife. Griaule, of course, was most changed. Scaffolding hung from his back; artisans, suspended by webworks of ropes, crawled over his side; and all the scales to be worked had either been painted or primed. The tower rising to his eye was swarmed by laborers, and at night the calciners and vats atop his head belched flame into the sky, making it seem there was a mill town in the heavens. At his feet was a brawling shantytown populated by prostitutes, workers, gamblers, ne'er-do-wells of every sort, and soldiers: the burdensome cost of the project had encouraged the city fathers of Teocinte to form a regular militia, which regularly plundered the adjoining states and had posted occupation forces to some areas. Herds of frightened animals milled in the slaughtering pens, waiting to be rendered into oils and pigments. Wagons filled with ores and vegetable products rattled in the streets. I myself had brought a cargo of madder roots from which a rose tint would be derived.

"It was not easy to arrange a meeting with Cattanay. While he did none of the actual painting, he was always busy in his office consulting with engineers and artisans, or involved in some other part of the logistical process. When at last I did meet with him. I found he had changed as drastically as Griaule. His hair had gone gray, deep lines scored his features, and his right shoulder had a peculiar bulge at its midpoint — the product of a fall. He was amused by the fact that I wanted to buy the painting, to collect the scales after Griaule's death. and I do not believe he took me at all seriously. But the woman Jarcke, his constant companion, informed him that I was a responsible businessman, that I had already bought the bones, the teeth, even the dirt beneath Griaule's belly (this I eventually sold as having magical properties).

"'Well,' said Cattanay, 'I suppose someone has to own them.'

"He led me outside, and we stood looking at the painting.

" 'You'll keep them together?' he asked.

"I said, 'Yes.'

"'If you'll put that in writing,' he said, 'then they're yours.'

"Having expected to haggle long and hard over the price, I was flabbergasted; but I was even more flabbergasted by what he said next.

"'Do you think it's any good?' he asked.

"Cattanay did not consider the painting to be the work of bis imagination; he felt he was simply illuminating the shapes that appeared on Griaule's side and was convinced that once the paint was applied, new shapes were produced beneath it, causing him to make constant

changes. He saw himself as an artisan more than a creative artist. But to put his question into perspective, people were beginning to flock from all over the world and marvel at the painting. Some claimed they saw intimations of the future in its gleaming surface; others underwent transfiguring experiences; still others — artists themselves - attempted to capture something of the work on canvas, hopeful of establishing reputations merely by being competent copyists of Cattanay's art. The painting was nonrepresentational in character, essentially a wash of pale gold spread across the dragon's side; but buried beneath the laminated surface were a myriad tints of iridescent color that, as the sun passed through the heavens and the light bloomed and faded, solidified into innumerable forms and figures that seemed to flow back and forth. I will not try to categorize these forms, because there was no end to them; they were as varied as the conditions under which they were viewed. But I will say that on the morning I met with Cattanay, I - who was the soul of the practical man, without a visionary bone in my body - felt as though I were being whirled away into the painting, up through geometries of light, latticeworks of rainbow color that built the way the edges of a cloud build, past orbs, spirals, wheels of flame..."

 from This Business of Griaule by Henry Sichi

2.

here had been several women in Meric's life since he arrived in the valley, most had been attracted by his growing fame and his association with the mystery of the dragon, and most had left him for the same reasons, feeling daunted and unappreciated. But Lise was different in two respects. First, because she loved Meric truly and well; and second, because she was married - albeit unhappily - to a man named Pardiel, the foreman of the calciner crew. She did not love him as she did Meric, yet she respected him and felt obliged to consider carefully before ending the relationship. Meric had never known such an introspective soul. She was twelve years younger than he, tall and lovely, with sun-streaked hair and brown eyes that went dark and seemed to turn inward whenever she was pensive. She was in the habit of analyzing everything that affected her, drawing back from her emotions and inspecting them as if they were a clutch of strange insects she had discovered crawling on her skirt. Though her penchant for self-examination kept her from him, Meric viewed it as a kind of baffling virtue. He had the classic malady and could find no fault with her. For almost a year they were as happy as could be expected; they talked long hours and walked together, and on those occasions when Pardiel worked double shifts and was forced to bed down by his furnaces, they spent the nights making love in the cavernous spaces beneath the dragon's wing.

It was still reckoned an evil place.

Something far worse than skizzers or flakes was rumored to live there, and the ravages of this creature were blamed for every disappearance, even that of the most malcontented laborer. But Meric did not give credence to the rumors. He half-believed Griaule had chosen him to be his executioner and that the dragon would never let him be harmed; and besides, it was the only place where they could be assured of privacy.

A crude stair led under the wing, handholds and steps hacked from the scales - doubtless the work of scale hunters. It was a treacherous passage, six hundred feet above the valley floor; but Lise and Meric were secured by ropes, and over the months, driven by the urgency of passion, they adapted to it. Their favorite spot lay fifty feet in (Lise would go no farther; she was afraid even if he was not), near a waterfall that trickled over the leathery folds, causing them to glisten with a mineral brilliance. It was eerily beautiful, a haunted gallery. Peels of dead skin hung down from the shadows like torn veils of ectoplasm; ferns sprouted from the vanes, which were thicker than cathedral columns; swallows curved through the black air. Sometimes, lying with her hidden by a tuck of the wing, Meric would think the beating of their hearts was what really animated the place, that the instant they left, the water ceased flowing and the swallows vanished. He had an unshakable faith in the transforming power of their affections, and one morning as they dressed, preparing to return to Hangtown, he asked her to leave with him.

"To another part of the valley?" She laughed sadly. "What good would that do? Pardiel would follow us."

"No," he said. "To another country. Anywhere far from here."

"We can't," she said, kicking at the wing. "Not until Griaule dies. Have you forgotten?"

"We haven't tried."

"Others have."

"But we'd be strong enough. I know it!"

"You're a romantic," she said gloomily, and stared out over the slope of Griaule's back at the valley. Sunrise had washed the hills to crimson, and even the tips of the wings were glowing a dull red.

"Of course I'm a romantic!" He stood, angry. "What the hell's wrong with that?"

She sighed with exasperation. "You wouldn't leave your work," she said. "And if we did leave, what work would you do? Would...."

"Why must everything be a problem in advance!" he shouted. "I'll tattoo elephants! I'll paint murals on the chests of giants, I'll illuminate whales! Who else is better qualified?"

She smiled, and his anger evaporated.

"I didn't mean it that way," she said. "I just wondered if you could be satisfied with anything else."

She reached out her hand to be pulled up, and he drew her into an embrace. As he held her, inhaling the scent of vanilla water from her hair, he saw a diminutive figure silhouetted against the backdrop of the valley. It did not seem real - a black homunculus - and even when it began to come forward, growing larger and larger, it looked less a man than a magical keyhole opening in a crimson set hillside. But Meric knew from the man's rolling walk and the hulking set of his shoulders that it was Pardiel; he was carrying a long-handled hook, one of those used by artisans to maneuver along the scales.

Meric tensed, and Lise looked back to see what had alarmed him. "Oh, my God!" she said, moving out of the embrace.

Pardiel stopped a dozen feet away. He said nothing. His face was in shadow, and the hook swung lazily from his hand. Lise took a step toward him, then stepped back and stood in front of Meric as if to shield him. Seeing this, Pardiel let out an inarticulate yell and charged, slashing with the hook. Meric pushed Lise aside and ducked. He caught a brimstone whiff of the calciners as Pardiel rushed past and went sprawling, tripped by some irregularity in the scale. Deathly afraid, knowing he was no match for the foreman, Meric seized Lise's hand and ran deeper under the wing. He hoped Pardiel would be too frightened to follow, leery of the creature

that was rumored to live there; but he was not. He came after them at a measured pace, tapping the hook against his leg.

was dimpled downward by hundreds

of bulges, and this created a maze of

Higher on Griaule's back, the wing

small chambers and tunnels so low that they had to crouch to pass along them. The sound of their breathing and the scrape of their feet were amplified by the enclosed spaces, and Meric could no longer hear Pardiel. He had never been this deep before. He had thought it would be pitchdark; but the lichen and algae adhering to the wing were luminescent and patterned every surface, even the scales beneath them, with whorls of blue and green fire that shed a sickly radiance. It was as if they were giants crawling through a universe whose starry matter had not yet congealed into galaxies and nebulas. In the wan light, Lise's face - turned back to him now and again - was teary and frantic; and then, as she straightened, passing into still another chamber, she drew in breath with a shrick. At first Meric thought Pardiel had somehow managed to get ahead of them; but on entering he saw that the

At first Meric thought Pardiel had somehow managed to get ahead of them; but on entering he saw that the cause of her fright was a man propped in a sitting position against the far wall. He looked mummified. Wisps of brittle hair poked up from his scalp, the shapes of his bones were visible through his skin, and his eyes were empty holes. Between his legs was a

scatter of dust where his genitals had been. Meric pushed Lise toward the next tunnel, but she resisted and pointed at the man.

"His eyes," she said, horror-struck. Though the eyes were mostly a negative black, Meric now realized they were shot through by opalescent flickers. He felt compelled to kneel beside the man - it was a sudden, motiveless urge that gripped him, bent him to its will, and released him a second later. As he rested his hand on the scale, he brushed a massive ring that was lying beneath the shrunken fingers. Its stone was black, shot through by flickers identical to those within the eyes, and incised with the letter S. He found his gaze was deflected away from both the stone and the eyes, as if they contained charges repellent to the senses. He touched the man's withered arm; the flesh was rock-hard, petrified. But alive. From that brief touch he gained an impression of the man's life, of gazing for centuries at the same patch of unearthly fire, of a mind gone beyond mere madness into a perverse rapture, a meditation upon some foul principle. He snatched back his hand in revulsion.

There was a noise behind them, and Meric jumped up, pushing Lise into the next tunnel. "Go right," he whispered. "We'll circle back toward the stair." But Pardiel was too close to confuse with such tactics, and their flight became a wild chase,

scrambling, falling, catching glimpses of Pardiel's smoke-stained face, until finally - as Meric came to a large chamber — he felt the hook bite into his thigh. He went down, clutching at the wound, pulling the hook loose. The next moment Pardiel was atop him; Lise appeared over his shoulder, but he knocked her away and locked his fingers in Meric's hair and smashed his head against the scale. Lise screamed, and white lights fired through Meric's skull. Again his head was smashed down. And again. Dimly, he saw Lise struggling with Pardiel, saw her shoved away, saw the hook raised high and the foreman's mouth distorted by a grimace. Then the grimace vanished. His jaw dropped open and he reached behind him as if to scratch his shoulder blade. A line of dark blood eeled from his mouth and he collapsed, smothering Meric beneath his chest. Meric heard voices. He tried to dislodge the body, and the effects drained the last of his strength. He whirled down through a blackness that seemed as negative and inexhaustible as the petrified man's eyes.

Someone had propped his head on their lap and was bathing his brow with a damp cloth. He assumed it was Lise, but when he asked what had happened, it was Jarcke who answered, saying, "Had to kill him." His head throbbed, his leg throbbed even worse, and his eyes would not focus. The peels of dead skin hanging overhead appeared to be writhing. He realized they were out near the edge of the wing.

"Where's Lise?"

"Don't worry," said Jarcke. "You'll see her again." She made it sound like an indictment.

"Where is she?"

"Sent her back to Hangtown. Won't do you two bein' seen hand in hand the same day Pardiel's missin'."

"She wouldn't have left...." He blinked, trying to see her face; the lines around her mouth were etched deep and reminded him of the patterns of lichen on the dragon's scale. "What did you do?"

"Convinced her it was best," said Jarcke. "Don't you know she's just foolin' with you?"

"I've got to talk with her." He was full of remorse, and it was unthinkable that Lise should be bearing her grief alone; but when he struggled to rise, pain lanced through his leg.

"You wouldn't get ten feet," she said. "Soon as your head's clear, I'll help you with the stairs."

He closed his eyes, resolving to find Lise the instant he got back to Hangtown — together they would decide what to do. The scale beneath him was cool, and that coolness was transmitted to his skin, his flesh, as if he were merging with it, becoming one of its ridges.

"What was the wizard's name?" he asked after a while, recalling the petrified man, the ring and its incised letter. "The one who tried to kill Griaule...."

"Don't know as I ever heard it," said Jarcke. "But I reckon it's him back there."

"You saw him?"

"I was chasin' a scale hunter once what stole some rope, and I found him instead. Pretty miserable sort, whoever he is."

Her fingers trailed over his shoulder — a gentle, treasuring touch. He did not understand what it signaled, being too concerned with Lise, with the terrifying potentials of all that had happened; but years later, after things had passed beyond remedy, he cursed himself for not having understood.

At length Jarcke helped him to his feet, and they climbed up to Hangtown, to bitter realizations and regrets, leaving Pardiel to the birds or the weather or worse.

"...It seems it is considered irreligious for a woman in love to hesitate or examine the situation, to do anything other than blindly follow the impulse of her emotions. I felt the brunt of such an attitude — people judged it my fault for not having acted quickly and decisively one way or another. Perhaps I was overcautious. I do not claim to be free of blame, only innocent of sacrilege. I believe I might have eventually left Pardiel — there was not enough in the relationship to

sustain happiness for either of us. But I had good reason for cautious examination. My husband was not an evil man, and there were matters of loyalty between us.

"I could not face Meric after Pardiel's death, and I moved to another part of the valley. He tried to see me on many occasions, but I always refused. Though I was greatly tempted, my guilt was greater. Four years later, after Jarcke died - crushed by a runaway wagon — one of her associates wrote and told me Jarcke had been in love with Meric, that it had been she who had informed Pardiel of the affair, and that she may well have staged the murder. The letter acted somewhat to expiate my guilt, and I weighed the possibility of seeing Meric again. But too much time had passed, and we had both assumed other lives. I decided against it. Six years later, when Griaule's influence had weakened sufficiently to allow emigration. I moved to Port Chantay. I did not hear from Meric for almost twenty years after that, and then one day I received a letter, which I will reproduce in part.

" '...My old friend from Regensburg, Louis Dardano, has been living here for the past few years, engaged in writing my biography. The narrative has a breezy feel, like a tale being told in a tavern, which — if you recall my telling you how this all began - is quite appropriate. But on reading it, I am amazed my life has had such a simple shape. One task, one passion. God, Lise! Seventy years old, and I still dream of you. And I still think of what happened that morning under the wing. Strange, that it has taken me all this time to realize it was not Jarcke, not you or I who were culpable, but

Griaule. How obvious it seems now. I was leaving, and he needed me to complete the expression on his side, his dream of flying, of escape, to grant him the death of his desire. I am certain you will think I have leaped to this assumption, but I remind you that it has been a leap of forty years' duration. I know Griaule, know his monstrous subtlety. I can see it at work in every action that has taken place in the valley since my arrival. I was a fool not to understand that his powers were at the heart of our sad conclusion.'

"'The army now runs everything here, as no doubt you are aware. It is rumored they are planning a winter campaign against Regensburg. Can you believe it! Their fathers were ignorant, but this generation is brutally stupid. Otherwise, the work goes well and things are as usual with me. My shoulder aches, children stare at me on the street, and it is whispered I am mad....'"

 from Under Griaule's Wing by Lise Claverie

3.

cne-scarred, lean, arrogant, Major Hauk was a very young major with a limp. When Meric had entered, the major had been practicing his signature — it was a thing of elegant loops and flourishes, obviously intended to have a place in posterity. As he strode back and forth during their conversation, he paused frequently to admire himself in the window glass, settling the hang of his red jacket or running his fingers along the crease of his

white trousers. It was the new style of uniform, the first Meric had seen at close range, and he noted with amusement the dragons embossed on the epaulets. He wondered if Griaule was capable of such an irony, if his influence was sufficiently discreet to have planted the idea for this comic opera apparel in the brain of some general's wife.

"... not a question of manpower," the major was saying, "but of...." He broke off, and after a moment cleared his throat.

Meric, who had been studying the blotches on the backs of his hands, glanced up; the cane that had been resting against his knee slipped and clattered to the floor.

"A question of *materiel*," said the major firmly. "The price of antimony, for example..."

"Hardly use it anymore," said Meric. "I'm almost done with the mineral reds."

A look of impatience crossed the major's face. "Very well," he said; he stooped to his desk and shuffled through some papers. "Ah! Here's a bill for a shipment of cuttlefish from which you derive...." He shuffled more papers.

"Syrian brown," said Meric gruffly.
"I'm done with that, too. Golds and violets are all I need anymore. A little blue and rose." He wished the man would stop badgering him; he wanted to be at the eye before sunset.

As the major continued his ac-

counting, Meric's gaze wandered out the window. The shantytown surrounding Griaule had swelled into a city and now sprawled across the hills. Most of the buildings were permanent, wood and stone, and the cant of the roofs, the smoke from the factories around the perimeter, put him in mind of Regensburg. All the natural beauty of the land had been drained into the painting. Blackish gray rain clouds were muscling up from the east, but the afternoon sun shone clear and shed a heavy gold radiance on Griaule's side. It looked as if the sunlight were an extension of the gleaming resins, as if the thickness of the paint were becoming infinite. He let the major's voice recede to a buzz and followed the scatter and dazzle of the images; and then, with a start, he realized the major was sounding him out about stopping the work

The idea panicked him at first. He tried to interrupt, to raise objections; but the major talked through him, and as Meric thought it over, he grew less and less opposed. The painting would never be finished, and he was tired. Perhaps it was time to have done with it, to accept a university post somewhere and enjoy life for a while.

"We've been thinking about a temporary stoppage," said Major Hauk. "Then if the winter campaign goes well...." He smiled. "If we're not visited by plague and pestilence, we'll assume things are in hand. Of course we'd like your opinion."

Meric felt a surge of anger toward this smug little monster. "In my opinion, you people are idiots," he said. "You wear Griaule's image on your shoulders, weave him on your flags, and yet you don't have the least comprehension of what that means. You think it's just a useful symbol...."

"Excuse me," said the major stiffly.
"The hell I will!" Meric groped for his cane and heaved up to his feet.
"You see yourselves as conquerors. Shapers of destiny. But all your rapes and slaughters are Griaule's expressions. His will. You're every bit as much his parasites as the skizzers."

The major sat, picked up a pen, and began to write.

"It astounds me," Meric went on, "that you can live next to a miracle, a source of mystery, and treat him as if he were an oddly shaped rock."

The major kept writing.

major without looking up.

"What are you doing?" asked Meric.
"My recommendation," said the

"Which is?"

"That we initiate stoppage at once."

They exchanged hostile stares, and Meric turned to leave; but as he took hold of the doorknob, the major spoke again.

"We owe you so much," he said; he wore an expression of mingled pity and respect that further irritated Meric. "How many men have you killed, Major?" he asked, opening the door.

"I'm not sure. I was in the artillery.
We were never able to be sure."

"Well, I'm sure of my tally," said Meric. "It's taken me forty years to amass it. Fifteen hundred and ninetythree men and women. Poisoned, scalded, broken by falls, savaged by animals. Murdered. Why don't we you and I — just call it even."

Though it was a sultry afternoon, he felt cold as he walked toward the tower — an internal cold that left him light-headed and weak. He tried to think what he would do. The idea of a university post seemed less appealing away from the major's office; he would soon grow weary of worshipful students and in-depth dissections of his work by jealous academics. A man hailed him as he turned into the market. Meric waved but did not stop, and heard another man say, "Tbat's Cattanay?" (That ragged old ruin?)

The colors of the market were too bright, the smells of charcoal cookery too cloying, the crowds too thick, and he made for the side streets, hobbling past one-room stucco houses and tiny stores where they sold cooking oil by the ounce and cut cigars in half if you could not afford a whole one. Garbage, tornados of dust and flies, drunks with bloody mouths. Somebody had tied wires around a pariah dog — a bitch with slack teats;

the wires had sliced into her flesh, and she lay panting in an alley mouth, gaunt ribs flecked with pink lather, gazing into nowhere. She, thought Meric, and not Griaule, should be the symbol of their flag.

As he rode the hoist up the side of the tower, he fell into his old habit of jotting down notes for the next day. What's that cord of wood doing on level five? Slow leak of chrome yellow from pipes on level twelve. Only when he saw a man dismantling some scaffolding did he recall Major Hauk's recommendation and understand that the order must already have been given. The loss of his work struck home to him then, and he leaned against the railing, his chest constricted and his eyes brimming. He straightened, ashamed of himself. The sun hung in a haze of iron-colored light low above the western hills, looking red and bloated and vile as a vulture's ruff. That polluted sky was his creation as much as was the painting, and it would be good to leave it behind. Once away from the valley, from all the influences of the place, he would be able to consider the future.

A young girl was sitting on the twentieth level just beneath the eye. Years before, the ritual of viewing the eye had grown to cultish proportions; there had been group chanting and praying and discussions of the experience. But these were more practical times, and no doubt the young men

and women who had congregated here were now manning administrative desks somewhere in the burgeoning empire. They were the ones about whom Dardano should write: they. and all the eccentric characters who had played roles in this slow pageant. They gypsy woman who had danced every night by the eve, hoping charm Griaule into killing her faithless lover — she had gone away satisfied. The man who had tried to extract one of the fangs - nobody knew what had become of him. The scale hunters, the artisans. A history of Hangtown would be a volume in itself.

The walk had left Meric weak and breathless; he sat down clumsily beside the girl, who smiled. He could not remember her name, but she came often to the eye. Small and dark, with an inner reserve that reminded him of Lise. He laughed inwardly — most women reminded him of Lise in some way.

"Are you all right?" she asked, her brow wrinkled with concern.

"Oh, yes," he said; he felt a need for conversation to take his mind off things, but he could think of nothing more to say. She was so young! All freshness and gleam and nerves.

"This will be my last time," she said. "At least for a while. I'll miss it." And then, before he could ask why, she added, "I'm getting married tomorrow, and we're moving away."

He offered congratulations and asked her who was the lucky fellow.

"Just a boy." She tossed her hair, as if to dismiss the boy's importance; she gazed up at the shuttered membrane. "What's it like for you when the eye opens?" she asked.

"Like everyone else," he said. "I remember ... memories of my life. Other lives, too." He did not tell her about Griaule's memory of flight; he had never told anyone except Lise about that.

"All those bits of souls trapped in there," she said, gesturing at the eye. "What do they mean to him? Why does he show them to us?"

"I imagine he has his purposes, but I can't explain them."

"Once I remembered being with you," said the girl, peeking at him shyly through a dark curl. "We were under the wing."

He glanced at her sharply. "Tell me."

"We were ... together," she said, blushing. "Intimate, you know. I was very afraid of the place, of the sounds and shadows. But I loved you so much, it didn't matter. We made love all night, and I was surprised because I thought that kind of passion was just in stories, something people had invented to make up for how ordinary it really was. And in the morning even that dreadful place had become beautiful, with the wing tips glowing red and the waterfall echoing ... " She lowered her eyes. "Ever since I had that memory, I've been a little in love with you."

"Lise," he said, feeling helpless before her.

"Was that her name?"

He nodded and put a hand to his brow, trying to pinch back the emotions that flooded him.

"I'm sorry." Her lips grazed his cheek, and just that slight touch seemed to weaken him further. "I wanted to tell you how she felt in case she hadn't told you herself. She was very troubled by something, and I wasn't sure she had."

She shifted away from him, made uncomfortable by the intensity of his reaction, and they sat without speaking. Meric became lost in watching how the sun glazed the scales to reddish gold, how the light was channeled along the ridges in molten streams that paled as the day wound down. He was startled when the girl jumped to her feet and backed toward the hoist.

"He's dead," she said wonderingly.

Meric looked at her, uncomprehending.

"See?" She pointed at the sun, which showed a crimson sliver above the hill. "He's dead," she repeated, and the expression on her face flowed between fear and exultation.

The idea of Griaule's death was too large for Meric's mind to encompass, and he turned to the eye to find a counterproof — no glints of color flickered beneath the membrane. He heard the hoist creak as the girl headed down, but he continued to

wait. Perhaps only the dragon's vision had failed. No. It was likely not a coincidence that work had been officially terminated today. Stunned, he sat staring at the lifeless membrane until the sun sank below the hills; then he stood and went over to the hoist. Before he could throw the switch, the cables thrummed - somebody heading up. Of course. The girl would have spread the news, and all the Major Hauks and their underlings would be hurrying to test Griaule's reflexes. He did not want to be here when they arrived, to watch them pose with their trophy like successful fishermen.

It was hard work climbing up to the frontoparietal plate. The ladder swayed, the wind buffeted him, and by the time he clambered onto the plate, he was giddy, his chest full of twinges. He hobbled forward and leaned against the rust-caked side of a boiling vat. Shadowy in the twilight, the great furnaces and vats towered around him, and it seemed this system of fiery devices reeking of cooked flesh and minerals was the actual machinery of Griaule's thought materialized above his skull. Energyless, abandoned. They had been replaced by more efficient equipment down below, and it had been - what was it? -almost five years since they were last used. Cobwebs veiled a pyramid of firewood; the stairs leading to the rims of the vats were crumbling. The plate itself was scarred and coated with sludge.

"Cattanay!"

Someone shouted from below, and the top of the ladder trembled. God. they were coming after him! Bubbling over with congratulations and plans for testimonial dinners, memorial plaques, specially struck medals. They would have him draped in bunting and bronzed and covered with pigeon shit before they were done. All these years he had been among them, both their slave and their master, vet he had never felt at home. Leaning heavily on his cane, he made his way past the frontal spike - blackened by years of oily smoke - and down between the wings to Hangtown. It was a ghost town, now. Weeds overgrowing the collapsed shanties; the lake a stinking pit, drained after some children had drowned in the summer of '91. Where Jarcke's home had stood was a huge pile of animal bones, taking a pale shine from the half-light. Wind keened through the

"Meric!" "Cattanay."

tattered shrubs.

The voices were closer.

Well, there was one place where they would not follow.

The leaves of the thickets were speckled with mold and brittle, flaking away as he brushed them. He hesitated at the top of the scale hunters' stair. He had no rope. Though he had done the climb unaided many times, it had been quite a few years. The gusts of wind, the shouts, the sweep of the valley and the lights scattered

across it like diamonds on gray velvet - it all seemed a single inconstant medium. He heard the brush crunch behind him, more voices. To hell with it! Gritting his teeth against a twinge of pain in his shoulder, hooking his cane over his belt, he inched onto the stair and locked his fingers in the handholds. The wind whipped his clothes and threatened to pry him loose and send him pinwheeling off. Once he slipped; once he froze, unable to move backward or forward. But at last he reached the bottom and edged upslope until he found a spot flat enough to stand.

The mystery of the place suddenly bore in upon him, and he was afraid. He half-turned to the stair, thinking he would go back to Hangtown and accept the hurly-burly. But a moment later he realized how foolish a thought that was. Waves of weakness poured through him, his heart hammered. and white dazzles flared in his vision. His chest felt heavy as iron. Rattled, he went a few steps forward, the cane pocking the silence. It was too dark to see more than outlines, but up ahead was the fold of wing where he and Lise had sheltered. He walked toward it, intent on revisiting it; then he remembered the girl beneath the eye and understood that he had already said that good-bye. And it was good-bye - that he understood vividly. He kept walking. Blackness looked to be welling from the wing joint, from the entrances to the maze

of luminous tunnels where they had stumbled onto the petrified man. Had it really been the old wizard, doomed by magical justice to molder and live on and on? It made sense. At least it accorded with what happened to wizards who slew their dragons.

"Griaule?" he whispered to the darkness, and cocked his head, halfexpecting an answer. The sound of his voice pointed up the immensity of the great gallery under the wing, the emptiness, and he recalled how vital a habitat it had once been. Flakes shifting over the surface, skizzers. peculiar insects fuming in the thickets, the glum populace of Hangtown, waterfalls. He had never been able to picture Griaule fully alive - that kind of vitality was beyond the powers of the imagination. Yet he wondered if by some miracle the dragon were alive now, flying up through his golden night to the sun's core. Or had that merely been a dream, a bit of tissue glittering deep in the cold tons of his brain? He laughed. Ask the stars for their first names, and you'd be more likely to receive a reply.

He decided not to walk any farther — it was really no decision. Pain was spreading through his shoulder, so intense he imagined it must be glowing inside. Carefully, carefully, he lowered himself and lay propped on an elbow, hanging onto the cane. Good, magical wood. Cut from a hawthorn atop Griaule's haunch. A man had once offered him a small fortune

for it. Who would claim it now? Probably old Henry Sichi would snatch it for his museum, stick it in a glass case next to his boots. What a joke! He decided to lie flat on his stomach. resting his chin on an arm - the stony coolness beneath acted to muffle the pain. Amusing, how the range of one's decision dwindled. You decided to paint a dragon, to send hundreds of men searching for malachite and cochineal beetles, to love a woman, to heighten an undertone here and there, and finally to position your body a certain way. He seemed to have reached the end of the process. What next? He tried to regulate his breathing, to ease the pressure on his chest. Then, as something rustled out near the wing joint, he turned on his side. He thought he detected movement, a gleaming blackness flowing toward him ... or else it was only the haphazard firing of his nerves playing tricks with his vision. More surprised than afraid, wanting to see, he peered into the darkness and felt his heart beating erratically against the dragon's scale.

" ... It's foolish to draw simple conclusions from complex events, but I suppose there must be both moral and truth to this life, these events. I'll leave that to the gadflies. The historians, the social scientists, the expert apologists for reality. All I know is that he had a fight with his girlfriend over money and walked out. He sent

### THE DOOR INTO FIRE

The Stunning First Volume in Diane Duane's epic Tale of the Five



Cover Illustration: Susan Collins

"A marvelous first novel... Expands the limits of the swords and sorcery genre. Exciting, magical, intelligent." — Publishers Weekly

■ FIRST TRADE PAPERBACK EDITION September \$7.95

### THE DOOR INTO SHADOW



"Absorbing—the kind of book one reads in gulps and can not put down."
—Andre Norton

"A fine tale of daring, caring and sharing, of self-revelation and self-sacrifice."

—Anne McCaffrey, bestselling author Moreta, Dragonlady of Pern

■ FULL-COLOR FOLDOUT \$7.95

#### BLUEJAY INTERNATIONAL EDITION PAPERBACKS

- AUTHOR TOUR: OCTOBER—WASHINGTON, PHILADELPHIA, NEW YORK, BOSTON, TORONTO, OTTAWA—WORLD FANTASY CONVENTION
- LOOK FOR THE BLUEJAY KIOSK AT THE WORLD FANTASY CONVENTION



her a letter saying he had gone south and would be back in a few months with more money than she could ever spend. I had no idea what he'd done. The whole thing about Griaule had just been a bunch of us sitting around the Red Bear, drinking up my pay - I'd sold an article - and somebody said, 'Wouldn't it be great if Dardano didn't have to write articles, if we didn't have to paint pictures that color-coordinated with people's furniture or slave at getting the gooey smiles of little nieces and nephews just right?' All sorts of improbable moneymaking schemes were put forward. Robberies, kidnappings. Then the idea of swindling the city fathers of Teocinte came up, and the entire plan was fleshed out in minutes. Scribbled on napkins, scrawled on sketchpads. A group effort. I keep trying to remember if anyone got a glassy look in their eye, if I felt a cold tendril of Griaule's thought stirring my brains. But I can't. It was a half hour's sensation, nothing more. A drunken whimsy, an art-school metaphor. Shortly thereafter, we ran out of money and staggered into the streets. It was snowing - big wet flakes that melted down our collars. God, we were drunk! Laughing, balancing on the icy railing of the University Bridge. Making faces at the bundled-up burghers and their fat ladies who huffed and puffed past, spouting steam and never giving us a glance, and none of us - not even the burghers - knowing that we were living our happy ending in advance...."

from The Man Who Painted
The Dragon Griaule
by Louis Dardano
FOR JAMIE AND LAURA



### **Coming next month**

The feature story next month is Damon Knight's new novel CV. It is an engrossing thriller about a floating construction called Sea Venture and the invisible menace that turns its voyage into a horror.

The January issue is on sale December 5.

### **BOOKS-MAGAZINES**

S-F FANTASY MAGAZINES, BOOKS. 1985 catalog \$1.00. Collections purchased (large or small). Robert Madle, 4406 Bestor Dr., Rockville, MD 20853.

SCIENTIFANTASY SPECIALIST: Books, magazines. 20¢ stamp for catalog. Gerry de la Ree, Cedarwood, Saddle River, NJ 07458.

LARGE VARIETY OF SF hardcovers, paperbacks, and magazines for sale. Reasonable prices, free catalog. Gary Van Court, P.O. Box 46896, Seattle, WA 98146-0896.

SOFT BOOKS, 89 Marion Street, Toronto, Canada M6R 1E6. Howard Lovecraft, Arkham, Necronomicon, etc. bought/sold. Catalogues issued.

SEND 25¢ FOR CATALOG of Scientifantasy books & pulps. Canford, Drawer 216, Freeville, NY 13068.

WE PAY TOP PRICES for quality SF 1st ed.'s. Fantasy Archives, 71 8th Ave., NY 10014.

SPECULATIVE FICTION hardcover first editions. Catalogs issued. DMK BOOKS, 22946 Brenford, Woodland Hills, CA 91364.

SCIENCE FICTION, FANTASY, OCCULT catalogue. Rare, out of print, small press. Free. Sangraal, 189 23 St., Brooklyn, NY 11232.

PROOF JESUS NEVER EXISTED! Scholarly booklet proves Josephus created fictional Jesus. Gospels. \$4.00 — Vector, Box 6215-F, Bellevue, WA 98008.

FOREIGN EDITIONS OF FANTASY AND SCI-ENCE FICTION. Copies of French, German, Spanish, Japanese and Swedish editions available at \$2.50 each, three for \$7.00. Mercury Press, Box 56, Cornwall, CT 06753. SCIENCE FICTION/FANTASY Catalog, O-P 1st Edition Hardcovers. OTHERWORLDS, 23834 Wendover, Beachwood, OH 44122.

BOUGHT, SOLD, TRADED, SF&F hardbounds, pulps, digests. Send 2 stamps for gigantic 15,000 item catalog. Graham Holroyd, 778 Spencerport Rd., Rochester, NY 14606.

MOONSTONE BOOKCELLARS, INC. 2145 Pennsylvania Avenue, NW, Washington, D.C. 20037. (202) 659-2600. Science Fiction, Fantasy and Mysteries. Special Orders Welcome!

HARDCOVER SCIENCE FICTION, FANTASY. Reasonable Prices. Free Lists. Norman Syms, 8 Broadmoor Vale, Upper Weston, Bath, Avon, England BA1 4LP.

1000's of SCIENCE FICTION, HORROR, OC-CULT paperbacks, hardcovers. Free catalog. Lamira, Box 12093, Dept. 86, Baltimore, MD 21281.

OUT-OF-PRINT Books Found. Send Wants. SF/Occult Catalogues \$1.00 each. Booklook, 51F Maple Ave., Warwick, NY 10990.

65,000 SF and Mystery paperbacks, hardcovers, magazines in stock. Free catalogs. Pandora's Books, Box F-54, Neche, ND 58265.

SLADEK's "Xoids" \$1.00 postpaid: Drumm, POB 445, Polk City, Iowa 50226.

AN INDEX to The Magazine of Fantasy and Science Fiction, 1949 through 1983. Indexed by author and cover artists. Only \$4.95 postpaid. Ray Bowman, Box 5845, Toledo, Ohio 43613.

SCIENCE FICTION MAKES for many successful self-published books. Get personalized assistance publishing it yourself. Lowell Moss Creative Services, 760 Market #1036F, San Francisco, California 94102.

Do you have something to advertise to sf readers? Books, magazines, type-writers, telescopes, computers. space-drives, or misc. Use the F&SF Market Place at these low, low rates: \$10.00 for minimum of ten (10) words, plus \$1.00 for each additional word. Frequency discount: 10% for six consecutive insertions, 15% for twelve consecutive insertions. Send copy and remittance to: Adv. Dept., Fantasy and Science Fiction, P.O. Box 56, Cornwall, CT 06753.

TAKING THE BLADE — The enthralling new novel of modern swordsmen. Fletcher Publishing #401 — 810 W. Broadway, Van., B.C. V5Z 4C9. \$3.00 U.S. \$3.95 Can.

BOOK LISTS FREE. Kurash, 38750 Wood Road, Willoughby, Ohio 44094.

PUBLISH YOUR BOOK! Join our successful authors. All subjects invited. Publicity, advertising, beautiful books. Send for fact-filled booklet and free manuscript report. Carlton Press, Dept. FSL, 11 West 32 Street, New York 10001.

### **CLOTHING**

F&SF T-SHIRTS. Navy blue with original magazine logo imprinted in white OR: Red shirt with blue logo. Sm, med, large, extra-large. \$6.50 each. Mercury Press, Box 56, Cornwall, CT 06753.

#### MISCELLANEOUS

ESP LAB. This new research service group can help you. For FREE information write: AI G. Manning, ESP Lab of Texas, Box 216, Edgewood, TX 75117.

EARN MONEY AT HOME — \$100 to \$500 per week. Write for free details. SIAS, 9794 Forest Ln., Suite 210, Dallas, TX 75243.

FANTASY, SF, SPACE & MOVIE POSTERS. Giant selection. Picture catalog \$1.00. Space Station Studios, 33 Bacon St., Watertown, Mass. 02172

INVENTIONS, IDEAS, TECHNOLOGY WANTED! Industry, presentation/national exposition. 1-800-528-6050. X831.

20% OFF FANTASY GAMES AND MINIATURES. SEND \$1.00 for catalog. The Fantasy Apothecary, Post Office Box 19302, Orlando, Florida 32814.

PERFUMES — BELOW WHOLESALE! Famous fragrances. Save 80% — sample \$2.00. Catalog

50¢. Ariva, POB 26154, Prescott, AZ 86312.

Thor and Odin live! Discover Viking religion. Wotan, 3125 19th St. 297AD, Bakersfield, CA 93301.

BIO-RHYTHMS: MONTHLY or subscription. Sample? Send birthdate and \$1.00. C-DAR, Box #405-D, Canton, CT 06019.

L.C.D. PEN WATCH — \$4.95 postpaid. R. Tetreault, 19 Cottage, Littleton, N.H. 03561.

RE-MARK-ABLE RUBBERSTAMPS for all your paperwork. Dragons, Unicorns, Spaceshuttle, Enterprize, & more. Catalog \$1.00 from Rubberstamps, 616 S. Governor, Iowa City, IA 52240.

### PERSONAL

SINGLE? Meet that special person! Call DATE-LINE — free: 800-451-3245.

MAKE NEW FRIENDS. Join America's largest correspondence club. Information: Send stamp. Friendships Unlimited, Box 350, Brooklyn, NY 11202.

MEET OTHERS WORLDWIDE — For hobbies, sports, correspondence, vacations — friends all ages and interests. Electronic Exchange, Box 68-F2. Manhattan Beach, California 90266.

### **RECORDS/TAPES**

GREAT RADIO PROGRAMS! Science-Fiction, Mystery, Adventure. Free list cassettes. Rare Radio, Box 117-F, Sunland, Calif. 91040.

#### TRAVEL

GHOSTS! Unique tour to England in search of ghosts/spirits. Escorted by psychic researcher. Free brochure: 800-227-3800 extension "ICTS" (24-hour toll-free service).









### SPECIAL CHRISTMAS RATES

# Fantasy & Science Fiction

\$16.00	for	the	first	one-year
subscri	ptio	n		

postage: \$3.00 per year.

\$16.00 for the first subscription	\$12.00 for each additional one-year subscription				
Send Fantasy and (PLEASE PRINT)	Science Fi	ction as a	Christr	nas gi	ift:
То	Name of	Recipient			,
Street					
City		_ State	·	Zip	
(PLEASE PRINT)					
То	Name of	Recipient		<del></del>	
Street					
City				Zip	74D6
☐ I enclose \$	My name				
☐ Bill me after	Street				
Christmas	City		State	Z	
Enter my own suscription	İ	Mercury F	-		
□ New	İ	P.O. Box : Cornwall.		3	
☐ Renewal	   Gift cards wi	ill be sent to yo			rsonalize

with your own signature.

### INDEX TO VOLUME 67, JULY-DECEMBER 1984

Asimov, Isaac: Science

Jacobs, Harvey: The Man Who

Asimov, Isaac: Science		Jacobs, Harvey: The Man Who	
The Victorious GeneralJuly 1	100	Came CloseDec.	85
Coming Full CircleAug. 1	118	Jordan, Anne D.: The Spacing Of Fred	
The Different Years Of TimeSept. 1	134	McNerth (verse)	106
The Different Years Of		Karlin, Nurit: CartoonsAug.,	Sept.
The UniverseOct. 1	135	Kelly, James Patrick: Freedom Beach	
Far As Human Eye Could See Nov. 1	130	(novelet)Aug.	52
Made, Not Found Dec. 1	123	Kessel, John: Freedom Beach	
Bishop, Michael: Independence Day		(novelet)Aug.	52
Forever (verse)July	28	Kidd, Thomas: Cover for "The	
Block, Lawrence: The Boy Who		Blister"Septe	mber
Disappeared CloudsDec.	59	Kress, Nancy: Explanations, IncJuly	6
Bova, Ben: Isolation AreaOct.	76	Leman, Bob: InstructionsSept.	79
Bradley, Marion Zimmer: Somebody		McLaughlin, Cooper: The Smyler July	75
	101	Malzberg, Barry N.: Bedside	,,
Bryant, Edward: Armageddon Between	.01	ManorNov.	97
	119	Martin Honory Contents Luly (	
SetsSept. 1 The Man Of The FutureOct.	48	Martin, Henry: CartoonsJuly, (	JCt.,
		Nov.	NT
Budrys, Algis: BooksJuly - Do		May, Rex: CartoonsOct.,	
	108	Miller, Ronald: Acrostic PuzzleSept.	158
	108	Mueller, Richard: Dem Bones, Dem	
Chadwick, Paul: Cover for		Bones, Gonna Rise AgainNov.	67
"Ganglion"August		Finnegan's FakeDec.	109
Collins, Reid: Great Speckle Bird Aug.	72	Niemand, O.: The Artist Passes	
	159	It ByAug.	116
Dalmas, John: The Picture ManAug.	92	O'Neill, Gene: 300 S. Montgomery July	88
Dann, Jack: The Black Horn (novelet) Nov.	8	Owens, Barbara: The Doors	
Davidson, Avram: Dear Friend		(novelet)Nov.	48
CharleneAug.	39	Platt, Charles: Profile Of Rudy Rucker	
Davis, Grania: Dear Friend		(article)Dec.	18
Charlene	39	Pohl, Fred: The Greening Of Bed-Stuy	
Dawes, Joseph: CartoonsJuly, De	c.	(novella) July	11
Donaldson, Stephen R.: What Makes		The Blister (novella) Sept.	7
	129	Purtill, Richard: By The Dragon's	
Dryer, Stan: A Day In The Life Of A		CaveJuly	63
Classics ProfessorDec.	68	Robins, Madeline E.: Cuckoo Sept.	67
Eagleson, Duncan: Cover for: "The		Rucker, Rudy: Monument To The Third	•
Greening Of Bed-Stuy"July		International Dec.	8
Effinger, George Alec: The Aliens		Searles, Baird: Films and Television July	72
	147	Shepard, Lucius: The Night Of White	, 2
The Man Who Decided The Truth About		Bhairab (novelet)Oct.	8
	141	The Man Who Painted The Dragon	0
Elgin, Suzette Haden: Magic Granny		Griaule (novelet)Dec.	124
Says Don't Meddle	84	Sterling, Bruce: TelliamedSept.	134
Ellison, Harlan: Harlan Ellison's	04	Strickland, Brad: The Taker Of	145
		Children (monelet)	=0
WatchingAug, Se		Children (novelet)	78
Oct., De	ec.	Tritten, Larry: Play It Again, Sam Nov.	28
Etchemendy, Nancy: Clotaire's		Tuttle, Lisa: RedcapSept.	60
	106	Walotsky, Ron: Cover for "Somebody	
Farris, Joseph: CartoonsSept., N		Else's Magic"Octob	
Gilliland, Alexis: Cartoon Dec.	84	Cover for "The Doors"Noven	nber
Gloss, Molly: Seaborne (novelet) Dec.	85	Watson, Ian: The Flesh Of	
Gurney, James: Cover for "The Man		Her HairOct.	62
Who Painted The Dragon Griaule"Decemb	er	Wellen, Edward: PatternJuly	59
Harris, Sidney: CartoonJuly		Wightman, Wayne: Ganglion	
Hill, Hal: Quicksilver DayJuly	41	(novelet)Aug.	6
Hughes, Edward P.: Thicker Than		Yolen, Jane: The Five Points	
IchorJuly	29	Of RogueryNov.	40
Hughes, Kim: You Shall Have A Song		Young, Robert F.: Glass Houses Nov.	119
And Gladness Of HeartSept.	96		

## Explore new worlds beyond the limits of time and space.







1156 Pub.ed.\$12.95





7328 Pub ad \$15 05 Robert

Silverberg



0711 Spec ed



1222 Pub ed \$15 95



Men: A Day for Comb. pub.ed \$33.90



Lord: Anackire



Myth; Myth Conceptions; Myth Directions; Hit or



Kingdoms; The Grand Jubilee; And Then There'll Be Fireworks, Comb. pub. ed. \$31.85



0539 Thieves World; Tales from the Vulgar Unicorn; Shadows of Sanctuary.



5637 Split Inf Blue Adept; Juxtaposition Comb. pub.ed. \$34,40

### Take any 5 for \$1 with MEMBERSHIP.

SEE OTHER SIDE FOR ADDITIONAL SELECTIONS.

#### **How the Club Works:**

You'll receive your 5 books for only \$1 (plus shipping and handling) after your application for membership is accepted. We reserve the right to reject any application. However, once accepted as a member, you may examine the books in your home and, if not completely satisfied, return them within 10 days at Club expense. Your membership will be cancelled and you'll owe nothing

About every 4 weeks (14 times a year), we'll send you the Club's bulletin, Things to Come, describing the 2 coming Selections and a variety of Alternate choices. In addition, up to 4 times a year you may receive offers of special Selections, always at low Club prices. If you want the 2 Selections, you need do nothing; they'll be shipped automatically.

If you don't want a Selection, prefer an Alternate, or no book at all, just fill out the convenient form always provided and return it to us by the date specified.

We allow you at least 10 days for making your decision. If you do not receive the form in time to respond within 10 days and receive an unwanted Selection, you may return it at our expense.

As a member you need take only 4 Selections or Alternates during the coming year. You may resign any time thereafter or continue to enjoy Club benefits for as long as you wish. One of the 2 Selections each month is only \$4.98. Other Selections are higher, but always much less than hardcover publishers' editions up to 65% off. The Club offers more than 300 books to choose from. A shipping and handling charge is added to all shipments. Send no money now, but do mail the coupon today!

Note: Prices shown are publisher's edition prices

### SCIENCE FICTION BOOK CLUB®

Dept. RR-316, Garden City, N.Y. 11530

I want the best SF in or out of this world! Please accept my application for membership in the Science Fiction Book Club. Send me the 5 books I have numbered in the boxes below, and bill me just \$1 (plus shipping and handling). I agree to the Club Plan as described in this ad. I will take 4 more books at regular low Club prices in the coming year and may resign any time thereafter, SFBC offers serious works for mature readers.

1.	2.	3.	4.	5.
Mr. Ms	*	, ,		
		(Please p	orint)	
Address_				Apt. #
City				
				Zip

bound editions sometimes altered in size to fit special presses and save you even more. Members accepted in U.S.A. and Canada only. Canadian members will be serviced from Canada, Offer slightly different in Canada. 38-S231N

# LET YOURSELF RORT

through time...through space...
through other dimensions of mind and matter.





THE MISTS OF AVALON 0166 Pub.ed.\$16.95





\*1149 Comb pub.ed.\$33.90



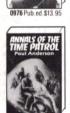


1206 Pub.ed.\$14.95

\*1164 Spec.ed.



0075 All 5 Amber novels. 2 vols. Comb. pub.ed. \$32.30



0786 The Guardians of Time; Time Patrolman, Spec.ed

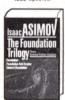


0752 Elric of Melniboné; The Sailor on the Seas of Fate: The Weird of the White Wolf.



1172 The Vanishing Tower; The Bane of the Black Sword; Stormbringer. Spec ed





6221 Foundation; Foundation and Empire: Second Foundation. Pub.ed.\$17.95



0992 Dragonsong; Dragonsinger; Dragondrums Comb. pub.ed. \$38.85

# **TAKE ANY 5 FOR \$1** WITH MEMBERSHIP See other side for coupon and additional Selections. THE SCIENCE FICTION BOOK CLUB®

Copyright : 1984 By Paramount Pictures Corporation STAR TREK Is A Trademark OI Paramount Pictures Corporation Registered In The U.S. Patent And Trademark Office All Rights Reserved